

ARTILLERY UNIT T&R EVENT INTERVALS

EVENT NUMBER	TRAINING INTERVAL (IN MONTHS)
IN-ST-130	12
SC-AR-201	2
SC-AR-202	2
SC-AR-203	2
SC-AR-204	6
SC-AR-205	2
SC-AR-206	2
SC-AR-207	2
SC-AR-208	6
SC-AR-209	2
SC-AR-210	6
SC-AR-211	2
SC-AR-212	6
SC-AR-213	6
SC-AR-214	2
SC-FD-221/ SC-BO-221	2
SC-FD-222/ SC-BO-222	2
SC-FD-223/ SC-BO-223	2
SC-FD-224/ SC-BO-224	2
SC-FD-225/ SC-BO-225	2
SC-FD-226/ SC-BO-226	2
SC-CO-291	2
SC-CO-292	2
SC-CO-293	2
SC-CO-294	2
SC-CO-295	2
SC-CO-296	2
SC-CO-297	2
SC-CO-298	2
SC-FO-231	2
SC-FO-232	2
SC-FO-233	2
SC-FO-234	2
SC-FO-235	2
SC-LN-241	2
SC-LN-242	3
SC-LN-243	2
SC-LN-244	2
SC-LN-245	2
SC-AM-214	2
SC-AM-215	2
SC-AM-216	2
SC-AM-217	2
SC-AM-218	6
SC-MD-201	2
SC-MD-202	6
SC-MD-203	2
BT-FG-301	2
BT-FG-302	2
BT-FG-303	2
BT-FG-304	2
BT-FG-305	2
BT-FG-306	2
BT-FG-307	2
BT-FG-308	6
BT-FG-309	2
SC-FD-227/SC-RF-221	3
SC-FD-228/SC-RF-222	3
SC-FD-229/SC-RF-223	3
SC-BI-201	2
SC-BI-202	2
SC-BI-203	2
SC-BI-204	2
SC-CS-281	2
SC-CS-282	2
SC-CS-283	2
SC-CS-284	2

<u>EVENT NUMBER</u>	<u>TRAINING INTERVAL (IN MONTHS)</u>
SC-CS-285	2
SC-CS-286	2
SC-CS-287	2
SC-CS-288	2
SC-LN-251	3
SC-LN-252	3
SC-LN-253	3
SC-LN-254	3
SC-LN-255	3
SC-SL-261	3
SC-SL-262	3
SC-SL-263	3
SC-SL-264	3
SC-SL-265	3
SC-NL-256	3
SC-NL-257	3
SC-NL-258	3
SC-NL-259	3
SC-NL-260	3
SC-NL-261	3
SC-SS-271	2
SC-SS-272	2
SC-SS-273	2
SC-SS-274	2
SC-SS-275	2
SC-BC-291	2
SC-BC-292	3
SC-BC-293	3
SC-BC-294	3
SC-BC-295	3
SC-RA-291	3
SC-RA-292	3
SC-RA-293	3
SC-RA-294	3
SC-WI-291	3
SC-WI-292	3
SC-BL-201	3
SC-BL-202	3
SC-BL-203	3
SC-BL-204	3
SC-BS-201	3
SC-BS-202	3
SC-BS-203	3
SC-BM-211	3
SC-BM-212	3
SC-BM-213	3
SC-BF-201	3
SC-BF-202	3
SC-BM-201	3
SC-BM-202	3
SC-BM-203	3
SC-BM-204	3
SC-BM-205	3
SC-AJ-201	3
SC-AJ-202	3
SC-AJ-203	3
SC-AJ-204	3
SC-AJ-205	3
SC-AJ-206	3
SC-AJ-207	3
BT-HQ-301	3
BT-HQ-302	3
BT-HQ-303	3
BT-HQ-304	3
BT-HQ-305	3
BT-HQ-306	6
BT-HQ-307	3
BN-HQ-401	3
BN-HQ-402	3

<u>EVENT NUMBER</u>	<u>TRAINING INTERVAL (IN MONTHS)</u>
BN-HQ-403	3
BN-HQ-404	3
BN-HQ-405	6
BN-HQ-406/ RG-HQ-506	3
BN-HQ-407	3
SC-RD-281	3
SC-RD-282	3
SC-RD-283	3
SC-RD-284	3
SC-RD-285	3
SC-RD-286	3
SC-RD-287	3
SC-RD-288	6
SC-TP-281	3
SC-TP-282	3
SC-TP-283	3
SC-TP-284	3
SC-FC-201	3
SC-FC-202	3
SC-FC-203	3
SC-FC-204	3
SC-RI-201	3
SC-RI-202	3
SC-RI-203	3
SC-RI-204	3
SC-RS-281	3
SC-RS-282	3
SC-RS-283	3
SC-RS-284	3
SC-RS-285	3
SC-RS-286	3
SC-RS-287	3
SC-RS-288	3
SC-MT-281	3
SC-MT-282	3
SC-MT-283	3
SC-MT-284	3
SC-MT-285	3
SC-MT-286	3
SC-MT-287	3
SC-MT-288	6
SC-RC-291	3
SC-RC-292	3
SC-RC-293	3
SC-RC-294	3
SC-RC-295	3
SC-RR-291	3
SC-RR-292	3
SC-RR-293	3
SC-RR-294	3
SC-RW-291	3
SC-RW-292	3
SC-RL-201	6
SC-RL-202	6
SC-RL-203	6
SC-RL-204	6
SC-RS-201	6
SC-RS-202	6
SC-RS-203	6
SC-RF-201	6
SC-RF-202	6
SC-RM-211	6
SC-RM-212	6
SC-RM-213	3
SC-RM-214	3
SC-RE-201	6
SC-RE-202	6
SC-RE-203	6
SC-RE-204	6

<u>EVENT NUMBER</u>	<u>TRAINING INTERVAL (IN MONTHS)</u>
SC-RE-205	6
SC-RE-206	6
SC-RE-207	6
SC-RE-208	6
SC-RM-201	6
SC-RM-202	6
SC-RM-203	6
SC-RM-204	6
SC-RM-205	6
SC-RJ-201	6
SC-RJ-202	6
SC-RJ-203	6
SC-RJ-204	6
SC-RJ-205	6
SC-HA-201	6
SC-HA-202	6
BT-HR-301	6
BT-HR-302	6
BT-HR-303	6
BT-HR-304	6
BT-HR-305	6
BT-HR-306	6
BT-HR-307	6
RG-HQ-501	6
RG-HQ-502	6
RG-HQ-503	6
RG-HQ-504	6
RG-HQ-505	6
RG-HQ-507	6

Appendix B to
ENCLOSURE (2)

ARTILLERY UNIT T&R EVENT CHAINING

<u>Event</u>	<u>Events updated</u>
IN-ST-130	NA
Firing Battery Section Events	
SC-AR-201	NA
SC-AR-202	SC-AR-201
SC-AR-203	SC-AR-201
SC-AR-204	SC-AR-201
SC-AR-205	SC-AR-201, SC-AR-203
SC-AR-206	SC-AR-201, SC-AR-203
SC-AR-207	SC-AR-201, SC-AR-202
SC-AR-208	SC-AR-207
SC-AR-209	SC-AR-207
SC-AR-210	SC-AR-207, SC-AR-209
SC-AR-211	SC-AR-203, SC-AR-209
SC-AR-212	NA
SC-AR-213	SC-AR-201, SC-AR-203
SC-FD-221	NA
SC-FD-222	SC-FD-221
SC-FD-223	SC-FD-221
SC-FD-224	SC-FD-221
SC-FD-225	SC-FD-221, SC-FD-224
SC-FD-226	SC-FD-221
SC-BO-221	NA
SC-BO-222	SC-BO-221
SC-BO-223	SC-BO-221
SC-BO-224	SC-BO-221
SC-BO-225	SC-BO-221, SC-BO-224
SC-CO-291	NA
SC-CO-292	SC-CO-291
SC-CO-293	SC-CO-291, SC-CO-292
SC-CO-294	SC-CO-291
SC-CO-295	SC-CO-291, SC-CO-294
SC-CO-296	SC-CO-291, SC-CO-292, SC-CO-293, SC-CO-294
SC-CO-297	SC-CO-291
SC-CO-298	SC-CO-291
SC-FO-231	NA
SC-FO-232	SC-FO-231
SC-FO-233	SC-FO-231
SC-FO-234	SC-FO-231, SC-FO-233
SC-FO-235	NA
SC-LN-241	NA
SC-LN-242	SC-LN-241
SC-LN-243	SC-LN-242
SC-LN-244	SC-LN-241, SC-LN-243
SC-LN-245	SC-LN-241, SC-LN-243, SC-LN-244
SC-AM-214	NA
SC-AM-215	SC-AM-214
SC-AM-216	SC-AM-215
SC-AM-217	SC-AM-215, SC-AM-216
SC-AM-218	SC-AM-215
SC-MD-201	NA
SC-MD-202	NA
SC-MD-203	NA
Firing Battery Events	
BT-FG-301	NA
BT-FG-302	SC-AR-209
BT-FG-303	BT-FG-301, BT-FG-302, SC-AR-201, SC-FD-221, SC-BO-221, SC-CO-291, SC-CO-292, SC-CO-294
BT-FG-304	BT-FG-303, SC-AR-203, SC-FD-224, SC-BO-224, SC-FO-233, SC-FO-234, SC-CO-296, SC-AM-216
BT-FG-305	BT-FG-303, SC-AR-202
BT-FG-306	BT-FG-303, SC-AR-207, SC-AR-208, SC-CO-295, SC-CO-295, SC-CO-297

<u>Event</u>	<u>Events updated</u>
BT-FG-307	BT-FG-302, SC-AR-209, SC-AR-211, SC-FD-224, SC-FO-234, SC-CO-295
BT-FG-308	BT-FG-301, BT-FG-302, BT-FG-303, BT-FG-304, BT-FG-305, BT-FG-306
BT-FG-309	BT-FG-303, BT-FG-305

Headquarters Battery, Battalion Section Events

SC-FD-227	NA
SC-FD-228	SC-FD-227
SC-FD-229	SC-FD-227, SC-FD-228
SC-BI-201	NA
SC-BI-202	SC-BI-201
SC-BI-203	SC-BI-201, SC-BI-202
SC-BI-204	SC-BI-201, SC-BI-202, SC-BI-203
SC-CS-281	NA
SC-CS-282	SC-CS-281
SC-CS-283	SC-CS-281
SC-CS-284	SC-CS-281, SC-CS-286
SC-CS-285	SC-CS-281
SC-CS-286	SC-CS-281
SC-CS-287	SC-CS-281, SC-CS-286
SC-CS-288	SC-CS-281, SC-CS-285
SC-LN-251	NA
SC-LN-252	SC-LN-251
SC-LN-253	SC-LN-252
SC-LN-254	SC-LN-251, SC-LN-253
SC-LN-255	SC-LN-251, SC-LN-253, SC-LN-254
SC-SL-261	NA
SC-SL-262	SC-SL-261
SC-SL-263	SC-SL-261
SC-SL-264	SC-SL-261, SC-SL-262, SC-SL-263
SC-SL-265	SC-SL-261, SC-SL-262, SC-SL-263, SC-SL-264
SC-NL-256	NA
SC-NL-257	SC-NL-256
SC-NL-258	SC-NL-256, SC-NL-257
SC-NL-259	SC-NL-257, SC-NL-258
SC-NL-260	SC-NL-258, SC-NL-259
SC-NL-261	SC-NL-256, SC-NL-258, SC-NL-259, SC-NL-260
SC-SS-271	NA
SC-SS-272	SC-SS-271

Headquarters Battery, Battalion Section Events

SC-SS-273	SC-SS-271
SC-SS-274	SC-SS-271, SC-SS-273
SC-SS-275	SC-SS-271
SC-BC-291	NA
SC-BC-292	SC-BC-291
SC-BC-293	SC-BC-291
SC-BC-294	SC-BC-291, SC-BC-293
SC-BC-295	SC-BC-291, SC-BC-293
SC-RA-291	NA
SC-RA-292	SC-RA-291
SC-RA-293	SC-RA-291
SC-RA-294	SC-RA-291, SC-RA-293
SC-WI-291	SC-RA-291
SC-WI-292	SC-WI-291
SC-BL-201	NA
SC-BL-202	NA
SC-BL-203	SC-BL-202
SC-BL-204	SC-BL-202
SC-BS-201	NA
SC-BS-202	SC-BS-201
SC-BS-203	SC-BS-202
SC-BM-211	NA
SC-BM-212	SC-BM-211
SC-BM-213	SC-BM-211
SC-BF-201	NA

EventEvents updated

SC-BF-202	SC-BF-201
SC-BM-201	NA
SC-BM-202	SC-BM-201
SC-BM-203	SC-BM-201
SC-BM-204	SC-BM-201, SC-BM-202
SC-BM-205	SC-BM-201
SC-AJ-201	NA
SC-AJ-202	NA
SC-AJ-203	SC-AJ-202
SC-AJ-204	SC-AJ-202
SC-AJ-205	NA
SC-AJ-206	SC-AJ-202
SC-AJ-207	SC-AJ-202

Headquarters Battery, Battalion Events

BT-HQ-301	NA
BT-HQ-302	BT-HQ-301, SC-BC-295, SC-BL-203
BT-HQ-303	BT-HQ-301, SC-FD-227, SC-BC-293, SC-BC-295, SC-RA-291, SC-BL-202, SC-BS-201, SC-BM-211, SC-BF-201, SC-BM-201, SC-AJ-202, SC-AJ-205
BT-HQ-304	BT-HQ-303, SC-WI-291, SC-BI-204, SC-BL-204
BT-HQ-305	BT-HQ-303, SC-BC-295, SC-WI-292
BT-HQ-306	BT-HQ-301, BT-HQ-302, BT-HQ-303, BT-HQ-304, BT-HQ-305
BT-HQ-307	BT-HQ-303, BT-HQ-304

Battalion Events

BN-HQ-401	NA
BN-HQ-402	BT-FG-304, BT-HQ-303
BN-HQ-403	BT-FG-304, BT-HQ-303, SC-RA-292, SC-FD-227, SC-FD-228, SC-FD-229, SC-LN-241, SC-LN-242, SC-LN-243, SC-LN-244, SC-LN-245, SC-LN-253, SC-SL-262, SC-SL-263, SC-SL-264, SC-NL-259, SC-SS-275, SC-BC-293, SC-BC-294, SC-BC-295, SC-RA-291
BN-HQ-404	BN-HQ-403, SC-BL-201, SC-BS-201, SC-BS-202, SC-BM-211, SC-BM-212, SC-BF-201, SC-BF-202, SC-BM-201, SC-AJ-202
BN-HQ-405	BN-HQ-402, BN-HQ-403, BN-HQ-404, BN-HQ-406, BN-HQ-407, BT-HQ-306, BT-FG-308
BN-HQ-406	BN-HQ-402, BN-HQ-403, BT-FG-305, BT-HQ-304, SC-BI-201, SC-BI-202, SC-BI-203, SC-BI-204
BN-HQ-407	BN-HQ-402, BN-HQ-403, BN-HQ-406, SC-LN-255, SC-SL-265, SC-NL-261, SC-SS-275, SC-LN-245

Headquarters Battery, Regiment Section Events

SC-RF-221	NA
SC-RF-222	SC-RF-221
SC-RF-223	SC-RF-221, SC-RF-222
SC-RD-281	NA
SC-RD-282	SC-RD-281
SC-RD-283	SC-RD-281, SC-RD-282
SC-RD-284	SC-RD-281, SC-RD-282
SC-RD-285	SC-RD-281, SC-RD-284
SC-RD-286	SC-RD-281, SC-RD-284
SC-RD-287	SC-RD-284
SC-RD-288	SC-RD-284
SC-TP-281	NA
SC-TP-282	SC-TP-281
SC-TP-283	SC-TP-281
SC-TP-284	SC-TP-281, SC-TP-283
SC-FC-201	NA
SC-FC-202	SC-FC-201
SC-FC-203	SC-FC-201, SC-FC-202
SC-FC-204	SC-FC-201
SC-RI-201	NA
SC-RI-202	SC-RI-201
SC-RI-203	SC-RI-201, SC-RI-202
SC-RI-204	NA

<u>Event</u>	<u>Events updated</u>
SC-RS-281	NA
SC-RS-282	NA
SC-RS-283	SC-RS-281
SC-RS-284	SC-RS-281
SC-RS-285	SC-RS-281
SC-RS-286	SC-RS-281, SC-RS-284
SC-RS-287	SC-RS-281, SC-RS-286
SC-RS-288	SC-RS-281
SC-MT-281	NA
SC-MT-282	SC-MT-281
Headquarters Battery, Regiment Section Events	
SC-MT-283	SC-MT-281, SC-MT-282
SC-MT-284	SC-MT-281, SC-MT-282
SC-MT-285	SC-MT-281, SC-MT-284
SC-MT-286	SC-MT-284
SC-MT-287	SC-MT-284
SC-MT-288	SC-MT-284
SC-RC-291	NA
SC-RC-292	SC-RC-291
SC-RC-293	SC-RC-291
SC-RC-294	SC-RC-291
SC-RC-295	SC-RC-291, SC-RC-293, SC-RC-294
SC-RR-291	SC-RC-291
SC-RR-292	SC-RR-291
SC-RR-293	SC-RC-291
SC-RR-294	SC-RR-291
SC-RW-291	SC-RC-291
SC-RW-292	SC-RW-291
SC-RL-201	NA
SC-RL-202	NA
SC-RL-203	SC-RL-202
SC-RL-204	SC-RL-202
SC-RS-201	NA
SC-RS-202	SC-RS-201
SC-RS-203	SC-RS-202
SC-RF-201	NA
SC-RF-202	SC-RF-201
SC-RM-211	NA
SC-RM-212	SC-RM-211
SC-RM-213	SC-RM-211
SC-RM-214	SC-RM-211
SC-RE-201	NA
SC-RE-202	SC-RE-201
SC-RE-203	SC-RE-201
SC-RE-204	SC-RE-201
SC-RE-205	SC-RE-201
SC-RE-206	SC-RE-201
SC-RE-207	SC-RE-201
SC-RE-208	SC-RE-201
SC-RM-201	NA
SC-RM-202	SC-RM-201
SC-RM-203	SC-RM-201, SC-RM-202
SC-RM-204	SC-RM-201
SC-RM-205	SC-RM-201
SC-RJ-201	NA
SC-RJ-202	SC-RJ-201
SC-RJ-203	NA
SC-RJ-204	SC-RJ-201, SC-RJ-202
SC-RJ-205	SC-RJ-201
SC-HA-201	NA
SC-HA-202	NA

Headquarters Battery, Regiment Events
BT-HR-301 NA

Headquarters Battery, Regiment Events
BT-HR-302 BT-HR-301, SC-RC-291, SC-RC-293,
 SC-RC-294, SC-RC-295

Appendix C to
ENCLOSURE (2)

<u>Event</u>	<u>Events updated</u>
BT-HR-303	BT-HR-301, SC-RC-291, SC-RC-293, SC-RC-294, SC-RF-221, SC-RI-201, SC-RW-291, SC-RL-202, SC-RS-201, SC-RF-201, SC-RM-211, SC-RE-201, SC-RM-201, SC-RJ-201, SC-HA-202
BT-HR-304	BT-HR-303, SC-RL-204
BT-HR-305	BT-HR-303, SC-TP-282, SC-RC-295, SC-RW-292, SC-RL-203, SC-RS-203
BT-HR-306	BT-HR-301, BT-HR-302, BT-HR-303, BT-HR-304, BT-HR-305
BT-HR-307	BT-HR-303

Regimental Events

RG-HQ-501	BN-HQ-401
RG-HQ-502	BN-HQ-402, BN-HQ-403, BN-HQ-406
RG-HQ-503	RG-HQ-502
RG-HQ-504	RG-HQ-502, RG-HQ-503, BN-HQ-404
RG-HQ-505	RG-HQ-502, RG-HQ-503, RG-HQ-504, BN-HQ-405
RG-HQ-506	RG-HQ-502, RG-HQ-503, BN-HQ-402, BN-HQ-403, BN-HQ-406
RG-HQ-507	SC-FC-201, SC-FC-202, SC-FC-203, SC-FC-204

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Appendix C to
ENCLOSURE (2)

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Appendix C to
ENCLOSURE (2)

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Appendix C to
ENCLOSURE (2)

ARTILLERY UNIT T&R MANUAL ANNUAL AMMUNITION REQUIREMENTS

<u>DODIC</u>	<u>NOMENCLATURE</u>	<u>10TH/11TH MAR</u>	<u>12TH MAR</u>	<u>14TH MAR</u>
Projectiles				
D501/ D502	ADAM-L ADAM-S	5,184	2,592	6,480
503/ D504	RAAM-L RAAM-S	5,184	2,592	6,480
D505	Illumination	3,888	1,944	4,860
D510	CLGP, M712	864	432	1,080
D528	Smoke, WP M825	4,320	2,160	5,400
D544/ D579	HE HE RA	27,216	13,608	34,020
D550	Smoke WP	3,024	1,512	3,780
D563	DPICM	1,728	864	2,160
Total		51,408	25,704	64,260
Fuzes				
N285/ N289	Mechanical Time Electronic Time	20,304	10,152	25,380
N286/ N290/ N291/ N311/ N335/ N340/ N463/ N464	Mechanical Time Electronic Time Proximity (VT) Super Quick/Delay PD SQ/D Point Detonating (PD) Proximity (VT) Proximity (VT)	30,240	15,120	37,800
Total		50,544	25,272	63,180
Propellants				
D532/ D533/ D534/ D540/ D541	Charge, Prop. Red Bag M203/ Red Bag M119/ White Bag w/zone 8 Green Bag/White Bag	51,408	25,704	64,260
Total		51,408	25,704	64,260
Primers				
N523	M82 Series	51,408	25,704	64,260
Total		51,408	25,704	64,260

DODIC	NOMENCLATURE	10TH/11TH MAR	12TH MAR	14TH MAR
Naval Gunfire Ammunition				
D295	5-inch/54 HE Fuze CVT	2,496	1,248	3,120
D313	5-inch/54 WP Fuze PD	192	96	240
D338	5-inch/54 HE Fuze MT	1,152	576	1,440
D339	5-inch/54 HE Fuze PD	7,296	3,648	9,120
D353	5-inch/54 Illum	1,344	672	1,680
Total		12,480	6,240	15,600
Demolitions				
M032	Charge, Demo, 1-lb Block, TNT	1,145	570	1,425
M131	Cap, Blasting, Non-Electric	1,145	570	1,425
M456	Cord, Detonating	5,725 ft	2,850 ft	7,125 ft
M670	Fuze, Blasting Time	2,290 ft	1,108 ft	2,770 ft
M766	Igniter, Time, Blasting, M60	1,145	570	1,425

NOTE. These annual ammunition requirements are derived from both the Training and Readiness Events and the Individual Training Standards. They are not additional ammunition requirements. The ammunition listed here will train the ITS's concurrently with the training events that are required to maintain a CRP level of 100%. The ammunition is a "perfect world" requirement and because of range restrictions, some of the events cannot be completed with live fire. The ammunition listed for the regiments is a total of the requirements from the section level through the regimental level.

The method of determining the ammunition requirement was a process of determining the events that required training, the number of personnel requiring that training, and the required frequency of the training. The ammunition was associated with the shooters involved with the event, e.g. observers (forward observers, scout observers, survey, and radar) and the section chief for each howitzer section. Ammunition is required to train two (2) observers per team for a total of six (6) per battery. Ammunition is required to train six (6) howitzer sections per battery. The ammunition requirement was based on the greatest number of rounds required to complete the event, e.g. the event of conducting a registration includes the ammunition required to complete a precision registration, quick and time. If as dictated by the tactical situation, the event is completed with an abbreviated registration, the commander would then have the remaining ammunition to retrain that event or to train other areas. The ammunition requirement was then multiplied by the frequency in which that event is to be trained.

These requirements are based on 100% manning levels. Since manning levels are rarely at 100%, refer to the current edition of MCBUL 8011 for actual ammunition allocations. Ammunition allocations stated in MCBUL 8011 are the result of annual review by operating forces Subject Matter Experts comparing the stated requirement in this manual to their unit manning levels and their annual training plans.

The Naval Gunfire ammunition requirements were determined in the same manner as the artillery ammunition. However, the Navy allocates Naval Gunfire ammunition to Naval Gunfire ships to meet the USMC Naval Gunfire training requirement. This is the USMC stated requirement that the Navy must consider for their Naval Gunfire training allocation.

METEOROLOGICAL EQUIPMENT REQUIREMENT

<u>Component NSN</u>	<u>Component Nomenclature</u>
6666-00-408-4178	Parachute, MET
6660-00-151-7772	Balloon, MET 100
6660-00-151-7773	Balloon, MET 100
6660-00-515-4214	Balloon, MET 300
6660-00-809-5114	Balloon, MET 1000
6660-00-999-2661	Meter, Volume, HY
6660-00-818-6630	Nozzle, MET
5120-01-013-1767	Twine, Fibrous
4730-00-263-3306	Hose, MET
5120-00-224-4128	Sledge Hammer
5180-00-408-1859	Tool Kit, Electronic
6660-00-223-5084	Psychrometer
6660-01-316-3652	Barometer, Aneroid
6660-01-353-8792	Radiosonde, Omega
6660-01-353-8793	Radiosonde, RDF
6660-01-340-7906	Radiosonde, Loran

Appendix D to
ENCLOSURE (2)

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Appendix D to
ENCLOSURE (2)

INDIVIDUAL TRAINING

(Occupational Field 08 Individual Training Standards - OCCFLD 08 ITSs)

Appendix: (A) Description of an Individual Training Standard
(B) Management of Individual Training Standards
(C) Summary/Index of Individual Training Standards
(D) Common Individual Training Standards
(E) Training Support
(F) Individual Training Standards
(G) Summary/Index of Individual Training Standards by Specific
Category (MOJT, DL, PST)

1. Purpose. To publish Individual Training Standards (ITS) at appendix (A) through (G) for OccFld 08.

2. Background

a. ITSs establish the training requirements for all Marines in the same occupational field (OccFld), Military Occupational Specialty MOS), or billet. They provide a foundation upon which unit commanders, Functional Learning Center (FLC) directors, and distance learning (DL) developers build training packages for individual Marines as part of unit training plans or formal courses of instruction.

b. ITSs represent the skills that contribute to the unit mission as expressed in the Training and Readiness Events (TRE). Changes to doctrine or force structure or the introduction of new weapons or equipment may necessitate revision of this Order.

3. Information

a. ITSs are used by unit commanders, FLC directors, and DL developers to design, develop, conduct, and evaluate the individual training of Marines. Unit commanders are responsible for the sustainment of all individual tasks that have been deemed, through analysis, to support the unit's Mission Essential Task List (METL). Unit commanders can, therefore, use the tasks contained in this Order as the basis of individual training through Managed On-the-Job Training (MOJT), instruction in unit-level schools, or incorporation in their training plans. FLC directors and DL developers will derive Terminal Learning Objectives (TLOs) and Enabling Learning Objectives (ELOs) from the tasks, conditions, standards, and performance steps of each associated ITS. Task lists reported on Course Descriptive Data (CDD) submissions will consist of tasks contained in this Order that are designated for training at the appropriate level in the FLC. Task lists reported on Distance Learning Descriptive Data (DLDD) submissions will consist of tasks contained in this Order that are designated for DL training at the appropriate level.

b. Unit commanders and FLC directors are responsible for performing ORM, per reference (h) of the basic order, while reviewing and designing training programs and making interventions that reduce risk to acceptable levels.

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ENCLOSURE (3)

DESCRIPTION OF AN INDIVIDUAL TRAINING STANDARD

1. ITS Designator. Each ITS has a unique three-part identifier that represents an MOS (or billet), a duty (or functional) area within that MOS, and a specific task included in that duty area. Each part is separated by periods. An example of an ITS Designator is 0311.02.08.

a. The first four positions ("0311" in the example above) represent the MOS or billet. For any ITS associated with an official MOS, the four digits must be identical to those assigned to the MOS in MCO P1200.7 (MOS Manual).

b. The middle two positions ("02" in the example above) represent the duty or functional area. Duty areas within a given MOS are assigned Arabic numerals. Duty areas 1 through 9 are always preceded by a leading zero. In the example above, "02" represents the second duty area under MOS 0311.

c. The last two positions ("08" in the example above) represent a specific task. Tasks within a specific duty or functional area are assigned Arabic numerals. Tasks 1 through 9 are always preceded by a leading zero. In the example above, "08" represents one task within the second duty area under MOS 0311.

2. ITS Components. There are six basic components of an ITS, five of which are mandatory:

a. Task. The task describes a specific and necessary behavior expected of a Marine in a particular MOS or billet. It is a clearly stated, performance-oriented action requiring a learned skill. Skills that "make" a Marine or qualify that Marine for an MOS are designated as "Core." Those advanced skills that are mission, grade, or billet specific are designated as "Core Plus."

b. Condition(s). This portion of the ITS describes the equipment, manuals, assistance/supervision, special physical demands, environmental conditions, and location affecting a Marine's performance of the task under real-world circumstances.

c. Standard(s). This portion of the ITS describes the level of proficiency to which the individual must perform the task.

d. Performance Steps. Collectively, the performance steps represent the logical sequence of actions required of the Marine to perform the task to standard. These actions are typically detailed in the references.

e. Reference(s). References are doctrinal publications, technical manuals, and other publications upon which the ITS and its performance steps are based. They should be readily available and provide detail to the procedures that are only summarized in the performance steps.

f. Administrative Instructions (Optional). Administrative instructions provide the trainer/instructor with special required or recommended circumstances, including safety precautions, relating to the training or execution of the task. These instructions may also clarify the meaning of the task.

3. ITS Training

a. Initial Training Setting. All ITSs are assigned an initial training setting that includes a specific location for initial instruction [Functional Learning Center (FLC) or Managed On-The-Job Training (MOJT)], a sustainment factor (number of months between evaluation or retraining to maintain the proficiency required by the standard), and a "Required By" grade (the lowest grade at which task proficiency is required).

b. Training Materiel (Optional). Training materiel includes all training devices, simulators, aids, equipment, and materials [except ammunition, distance learning (DL) products, and performance support tools (PST)] required or recommended to properly train the task under the specified conditions and to the specified standard.

c. Ammunition (Optional). This section includes any ammunition, explosives, and/or pyrotechnics required for proper training of the ITS.

d. Distance Learning Product(s) (Optional). This section includes a list of any currently available or planned DL products designed to provide training related to this task.

e. Performance Support Tool(s) (Optional). This section includes a list of any currently available or planned PSTs designed to provide training related to this task.

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Appendix A to
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MANAGEMENT OF INDIVIDUAL TRAINING STANDARDS

1. ITS Use

a. ITSs form the basis for all individual training in Functional Learning Centers (FLC) and units. They are written for all MOSs in order to specify the critical skills required by units of their individual Marines in support of the unit's combat missions as defined in the unit's Mission Essential Task List (METL).

b. FLC directors are responsible for reviewing all ITSs marked for initial training at the FLC. They must conduct courses of instruction on those ITSs appropriate for their student populations in terms of grade or rank. The task portion of each ITS taught in a given course must appear in the Task List (Item 24) of the CDD for that course. In accordance with the Systems Approach to Training (SAT), a Program of Instruction (POI) must also be developed for the course.

c. ITSs provide measures of performance that can be used by unit commanders to diagnose individual deficiencies and design training. Noted deficiencies should be scheduled for remediation on training plans or through Managed On-The-Job Training (MOJT), as appropriate.

d. A Marine should continue to receive instruction on ITSs that support the unit's METL. Individual training cannot cease upon graduation from the FLC because FLCs cannot prepare every Marine to serve in every billet. Individuals should be given opportunities in the unit to gain experience and responsibility as quickly as possible.

2. ITS Maintenance

a. A relationship exists between ITSs and the threat to Marine forces. Changes in the threat often trigger corresponding changes in our weapons, equipment, or doctrine, which then necessitate producing new or updated training standards. Such action requires a team effort on the part of the operating forces, the FLCs, and staff agencies at both Headquarters, U.S. Marine Corps and the Marine Corps Combat Development Command (MCCDC).

b. ITSs are ultimately validated by unit commanders and FLC directors. Records of Proceedings (ROP) resulting from Course Content Review Boards (CCRB) conducted by FLCs are particularly well suited for recommending revisions. The ROP should contain a justification for each proposed addition, deletion, or change and should accompany any request to obtain authority to depart from the currently published ITSs. Unit commanders can recommend changes through participation in a school's CCRB or directly via the chain of command. Unless significant changes warrant earlier action, ITS orders are usually revised and republished on a 4-year cycle.

c. ITS management is a dynamic process involving user maintenance as the key to refining standards to best serve unit missions. ITS users should evaluate whether ITSs support or fail to support an MOS, and ITS components should be examined for realism and pertinence. Users are encouraged to submit recommended changes to published ITSs through the chain of command.

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SUMMARY/INDEX OF INDIVIDUAL TRAINING STANDARDS

1. General. This enclosure is a summary listing of all ITS tasks grouped by MOS and Duty Area.
2. Format. The columns are as follows:
- a. SEQ. Sequence Number. This number dictates the order in which tasks for a given duty area are displayed.
 - b. TASK. ITS Designator. This is the permanent designator assigned to the task when it is created.
 - c. TITLE. ITS Task Title.
 - d. CORE. An "X" appears in this column when the task is designated as a "core" task required to "make" a Marine and qualify that Marine for the appropriate MOS. The absence of an "X" indicates that this is an advanced ("core plus") task that is mission, grade, or billet specific.
 - e. FLC. Functional Learning Center. An "X" appears in this column when the FLC is designated as the initial training setting. The absence of an "X" indicates that the initial training is accomplished through Managed On-The-Job Training (MOJT).
 - f. DL. Distance Learning Product. An "X" in this column indicates that at least one DL product is associated with this task. Consult enclosure (6) for details.
 - g. PST. Performance Support Tool. An "X" in this column indicates that at least one PST is associated with this task. Consult enclosure (6) for details.
 - h. SUS. Sustainment Training Period. An entry in this column represents the number of months between evaluation or retraining by the unit to maintain the proficiency required by the standard, provided the task supports the unit's METL.
 - i. REQ BY. Required By. An entry in this column depicts the lowest grade required to demonstrate proficiency in this task.
 - j. PAGE. Page Number. This column lists the number of the page in enclosure (6) that contains detailed information concerning this task.

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ BY	PAGE
MOS 0802, FIELD ARTILLERY OFFICER									
DUTY AREA 01 - OBSERVED FIRE									
1)	0802.01.01	DIRECT THE OPERATIONS OF THE FORWARD OBSERVER (FO) TEAM	X	X	X	X	2	2ndLt	3-IF-1
2)	0802.01.02	SUPERVISE AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) EQUIPPED OBSERVATION POST					2	2ndLt	3-IF-2
3)	0802.01.03	PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	X	X	X		2	2ndLt	3-IF-3
4)	0802.01.04	CONSTRUCT A TERRAIN SKETCH	X	X	X		2	2ndLt	3-IF-3
5)	0802.01.05	PREPARE A VISIBILITY DIAGRAM			X		2	2ndLt	3-IF-4
6)	0802.01.06	LOCATE A TARGET BY GRID COORDINATES	X	X	X		2	2ndLt	3-IF-4
7)	0802.01.07	LOCATE A TARGET BY POLAR PLOT	X	X	X		2	2ndLt	3-IF-5
8)	0802.01.08	LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	X	X	X		2	2ndLt	3-IF-5
9)	0802.01.09	CONDUCT AN ADJUST FIRE MISSION	X	X	X		2	2ndLt	3-IF-6
10)	0802.01.10	CONDUCT FIRE MISSIONS USING AN OBSERVER DIGITAL TERMINAL	X	X			2	2ndLt	3-IF-6
11)	0802.01.11	CONDUCT FIRE MISSIONS WITH THE AN/GVS-5 LASER RANGE FINDER					2	2ndLt	3-IF-7

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
12)	0802.01.12	CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	X	X				2	2ndLt	3-IF-8
13)	0802.01.13	CONDUCT A MISSION ON A PLANNED TARGET	X	X		X		2	2ndLt	3-IF-9
14)	0802.01.14	CONDUCT AN IMMEDIATE SUPPRESSION MISSION	X	X		X		2	2ndLt	3-IF-10
15)	0802.01.15	CONDUCT A FIRE FOR EFFECT (FFE) MISSION	X	X		X		2	2ndLt	3-IF-10
16)	0802.01.16	CONDUCT AN ILLUMINATION MISSION	X	X		X		2	2ndLt	3-IF-11
17)	0802.01.17	CONDUCT A COORDINATED ILLUMINATION MISSION	X	X		X		2	2ndLt	3-IF-12
18)	0802.01.18	CONDUCT A FASCAM MISSION				X		2	2ndLt	3-IF-12
19)	0802.01.19	CONDUCT A DPICM MISSION				X		2	2ndLt	3-IF-13
20)	0802.01.20	CONDUCT A DANGER CLOSE FIRE MISSION	X	X		X		2	2ndLt	3-IF-14
21)	0802.01.21	CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY						2	2ndLt	3-IF-14
22)	0802.01.22	ADJUST FINAL PROTECTIVE FIRES				X		2	2ndLt	3-IF-15
23)	0802.01.23	CONDUCT AN IMMEDIATE SMOKE MISSION	X	X		X		2	2ndLt	3-IF-16
24)	0802.01.24	CONDUCT A QUICK SMOKE MISSION	X	X		X		2	2ndLt	3-IF-17
25)	0802.01.25	CONDUCT A DESTRUCTION MISSION						2	2ndLt	3-IF-18
26)	0802.01.26	CONDUCT A MISSION ON A MOVING TARGET	X	X				2	2ndLt	3-IF-19
27)	0802.01.27	CONDUCT A PRECISION REGISTRATION, QUICK AND TIME	X	X		X		2	2ndLt	3-IF-19
28)	0802.01.28	CONDUCT A HIGH-BURST OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION	X	X		X		2	2ndLt	3-IF-20
29)	0802.01.29	CONDUCT AN ABBREVIATED REGISTRATION	X	X		X		2	2ndLt	3-IF-21
30)	0802.01.30	CONDUCT A MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)						2	2ndLt	3-IF-22
31)	0802.01.31	ADJUST NAVAL GUNFIRE (NGF)				X		6	2ndLt	3-IF-22
32)	0802.01.32	CONDUCT FIRE MISSION ON IRREGULARLY SHAPED TARGETS						2	2ndLt	3-IF-23
33)	0802.01.33	CONDUCT A COPPERHEAD MISSION						2	2ndLt	3-IF-24
34)	0802.01.34	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE				X	X	2	2ndLt	3-IF-24
35)	0802.01.35	CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION		X	X		X	2	2ndLt	3-IF-25
36)	0802.01.36	INTEGRATE COMPANY ORGANIC INDIRECT FIRE WEAPONS INTO FIRE PLANS	X	X				2	2ndLt	3-IF-26
DUTY AREA 02 - FIRE DIRECTION										
1)	0802.02.01	APPLY THE PRINCIPLE OF ARTILLERY BALLISTICS TO ARTILLERY FIRES	X	X				2	2ndLt	3-IF-27
2)	0802.02.02	APPLY THE FIVE REQUIREMENTS FOR ACCURATE PREDICTED FIRE	X	X				2	2ndLt	3-IF-27
3)	0802.02.03	CONDUCT MUZZLE VELOCITY (MV) MANAGEMENT	X	X				2	2ndLt	3-IF-28
4)	0802.02.04	VERIFY THE CONSTRUCTION OF A SURVEYED FIRING CHART	X	X				2	2ndLt	3-IF-28
5)	0802.02.05	VERIFY A BATTERY COMPUTER UNIT (BCU) DATA BASE	X	X				2	2ndLt	3-IF-29
6)	0802.02.06	SUPERVISE THE CONSTRUCTION AND MAINTENANCE OF A TACTICAL SITUATION MAP	X	X				2	2ndLt	3-IF-29
7)	0802.02.07	ISSUE A FIRE ORDER	X	X				2	2ndLt	3-IF-29
8)	0802.02.08	VERIFY A BACKUP COMPUTER SYSTEM (BUCS) DATA BASE	X	X				2	2ndLt	3-IF-30
9)	0802.02.09	VERIFY COMPUTATION OF FIRING DATA	X	X				2	2ndLt	3-IF-30
10)	0802.02.10	APPLY THE FIVE STEPS TO IMPROVE FIRING DATA	X	X				2	2ndLt	3-IF-31
11)	0802.02.11	COMPUTE ALL REQUIRED SAFETY DATA	X	X				2	2ndLt	3-IF-31
12)	0802.02.12	SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS						2	2ndLt	3-IF-32
13)	0802.02.13	DETERMINE APPROPRIATE ACTIONS TO IMPROVE THE ACCURACY OF FIRING DATA USING THE BCS	X	X				2	2ndLt	3-IF-32
DUTY AREA 03 - CANNON										
1)	0802.03.01	EMPLOY THE APPROPRIATE HASTY SURVEY TECHNIQUE FOR DIRECTIONAL AND POSITIONAL CONTROL	X	X		X	X	2	2ndLt	3-IF-33
2)	0802.03.02	DETERMINE THE CAUSE OF INACCURATE FIRES	X	X				2	2ndLt	3-IF-34
3)	0802.03.03	LAY THE FIRING BATTERY	X	X		X	X	2	2ndLt	3-IF-35

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
4)	0802.03.04	PREPARE THE EXECUTIVE OFFICER’S (XO’S) REPORT	X	X			2	2ndLt		3-IF-35
5)	0802.03.05	COMPUTE THE EXECUTIVE OFFICER’S (XO’S) MINIMUM QUADRANT ELEVATION (MIN QE)/MIN SAFE TIME	X	X			2	2ndLt		3-IF-36
6)	0802.03.06	DECLINATE THE AIMING CIRCLE	X	X	X	X	2	2ndLt		3-IF-37
7)	0802.03.07	MEASURE THE ORIENTING ANGLE (OA)	X	X	X	X	2	2ndLt		3-IF-38
8)	0802.03.08	MEASURE THE AZIMUTH OF THE LINE OF FIRE	X	X	X	X	2	2ndLt		3-IF-38
9)	0802.03.09	DECLINATE THE M2 COMPASS	X	X			2	2ndLt		3-IF-39
10)	0802.03.10	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X	X	2	2ndLt		3-IF-40
11)	0802.03.11	OPERATE THE M94 MVS					2	2ndLt		3-IF-40
12)	0802.03.12	SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT					2	2ndLt		3-IF-41
13)	0802.03.13	SUPERVISE THE PREPARATION OF A BATTERY FOR FIRING	X	X			2	2ndLt		3-IF-41
14)	0802.03.14	MEASURE THE ANGLE OF SITE-TO-CREST AND THE PIECE-TO-CREST RANGE (PCR)	X	X			2	2ndLt		3-IF-42
15)	0802.03.15	DETERMINE WHETHER A HOWITZER IS SAFE TO FIRE	X	X			2	2ndLt		3-IF-42
16)	0802.03.16	SUPERVISE THE PREPARATION OF A PROJECTILE FOR FIRING	X	X			2	2ndLt		3-IF-43
17)	0802.03.17	SET UP AND RECOVER THE M2A2 AIMING CIRCLE	X	X	X	X	2	2ndLt		3-IF-43
18)	0802.03.18	PERFORM CRATER ANALYSIS			X		6	2ndLt		3-IF-44
19)	0802.03.19	PERFORM SHELL FRAGMENT ANALYSIS			X		6	2ndLt		3-IF-44
20)	0802.03.20	LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY				X	2	2ndLt		3-IF-45
21)	0802.03.21	VERIFY THE UNIT COMMANDER’S RECORD (NAVMC 10558A)			X		2	2ndLt		3-IF-46
22)	0802.03.22	SUPERVISE AMMUNITION MANAGEMENT ON THE GUN LINE					2	2ndLt		3-IF-46
DUTY AREA 04 - FIRE SUPPORT										
1)	0802.04.01	BRIEF THE MANEUVER COMMANDER ON EMPLOYMENT OF FIRE SUPPORT ASSETS	X	X		X	2	2ndLt		3-IF-47
2)	0802.04.02	BRIEF A FIRE SUPPORT COORDINATOR (FSC) ON FIELD ARTILLERY (FA) MISSIONS AND THEIR SEVEN INHERENT RESPONSIBILITIES	X	X		X	2	2ndLt		3-IF-48
3)	0802.04.03	PREPARE A TARGET LIST WORKSHEET AND SCHEDULING WORKSHEETS	X	X		X	2	2ndLt		3-IF-48
4)	0802.04.04	RECOMMEND EMPLOYMENT OF FIELD ARTILLERY (FA) SPECIAL MUNITIONS (SMOKE, ILLUMINATION, FASCAM, ICM, COPPERHEAD)	X	X		X	2	2ndLt		3-IF-49
5)	0802.04.05	BRIEF A MANEUVER COMMANDER ON THE FIRE SUPPORT PLAN	X	X			2	2ndLt		3-IF-50
6)	0802.04.06	INTERPRET AN ATTACK GUIDANCE (AG) MATRIX	X	X			2	2ndLt		3-IF-50
7)	0802.04.07	PREPARE AN ARTILLERY ESTIMATE OF SUPPORTABILITY	X	X			2	Capt		3-IF-51
8)	0802.04.08	SUPERVISE THE OPERATIONS OF A FIRE SUPPORT COORDINATION CENTER (FSCC)					2	1stLt		3-IF-51
9)	0802.04.09	PREPARE A TARGET BULLETIN (TARBUL)					2	1stLt		3-IF-53
10)	0802.04.10	PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST			X		2	1stLt		3-IF-53
11)	0802.04.11	DEVELOP A QUICK FIRE SUPPORT PLAN	X	X			2	2ndLt		3-IF-54
12)	0802.04.12	INFORM SUPPORTED MANEUVER COMMANDER OF THE FIELD ARTILLERY’S TACTICAL MISSIONS AND CORRESPONDING PLAN TO SUPPORT THE SCHEME OF MANEUVER	X	X			2	2ndLt		3-IF-55
13)	0802.04.13	COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION				X	2	1stLt		3-IF-55
14)	0802.04.14	ADVISE THE MANEUVER COMMANDER ON EMPLOYMENT OF TARGET AQUISITION ASSETS AVAILABLE, THEIR CAPABILITIES AND LIMITATIONS		X	X		2	Capt		3-IF-56
15)	0802.04.15	PREPARE THE FIRE SUPPORT EXECUTION MATRIX	X	X			2	2ndLt		3-IF-56

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
16)	0802.04.16	PLAN FIRE SUPPORT FOR MARINE AIR GROUND TASK FORCE (MAGTF) OPERATIONS		X	X			2	Capt	3-IF-57
DUTY AREA 05 - UNIT OPERATIONS										
1)	0802.05.01	DEVELOP AN ARTILLERY DECEPTION PLAN	X	X				6	Capt	3-IF-57
2)	0802.05.02	DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT				X		2	2ndLt	3-IF-58
3)	0802.05.03	CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION	X	X	X	X		2	2ndLt	3-IF-59
4)	0802.05.04	SUPERVISE A TACTICAL ROAD MARCH	X	X	X			2	2ndLt	3-IF-59
5)	0802.05.05	SUPERVISE A BATTERY DISPLACEMENT	X	X				2	2ndLt	3-IF-60
6)	0802.05.06	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X	X		2	2ndLt	3-IF-61
7)	0802.05.07	SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING				X		2	2ndLt	3-IF-61
8)	0802.05.08	SUPERVISE THE OPERATIONS OF A SURVEY SECTION				X	X	2	Capt	3-IF-62
DUTY AREA 06 - COMMUNICATIONS										
1)	0802.06.01	OPERATE FIRE SUPPORT COMMUNICATIONS SYSTEMS	X	X	X			2	2ndLt	3-IF-62
2)	0802.06.02	OPERATE AN ARTILLERY UNIT'S COMMUNICATION SYSTEM	X	X	X			2	2ndLt	3-IF-63
3)	0802.06.03	CONSTRUCT AND REPAIR FIELD EXPEDIENT ANTENNA				X		2	2ndLt	3-IF-64
DUTY AREA 07 - OBSERVER DIGITAL TERMINAL (ODT)										
1)	0802.07.01	PREPARE THE OBSERVER DIGITAL TERMINAL (ODT) FOR OPERATION	X	X				2	2ndLt	3-IF-64
2)	0802.07.02	ESTABLISH COMMUNICATIONS PARAMETERS WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X				2	2ndLt	3-IF-65
3)	0802.07.03	DETERMINE OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X				2	2ndLt	3-IF-65
4)	0802.07.04	REPORT OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X				2	2ndLt	3-IF-66
5)	0802.07.05	REPORT ENEMY ACTIVITY BY THE USE OF THE ATI MESSAGES WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X				2	2ndLt	3-IF-66
6)	0802.07.06	TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X				2	2ndLt	3-IF-66
7)	0802.07.07	REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X				2	2ndLt	3-IF-67
8)	0802.07.08	INPUT A TARGET IN THE KNOWN POINT FILE WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X				2	2ndLt	3-IF-67
9)	0802.07.09	VERIFY OBSERVER DIGITAL TERMINAL (ODT) INITIALIZATION	X	X				2	2ndLt	3-IF-68
10)	0802.07.10	VERIFY OBSERVER DIGITAL TERMINAL (ODT) INPUT MESSAGES	X	X				2	2ndLt	3-IF-68
DUTY AREA 08 - MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS)										
1)	0802.08.01	BRIEF A MANEUVER COMMANDER ON AUTOMATED SYSTEM CAPABILITIES, LIMITATIONS, AND INTEROPERABILITY CHARACTERISTICS						2	1stLt	3-IF-68
2)	0802.08.02	BRIEF A MANEUVER COMMANDER ON STANDARD MCFSS NET ARCHITECTURE						2	1stLt	3-IF-69
3)	0802.08.03	PLAN THE ALLOCATION OF AUTOMATED SUPPORT PARAMETERS						2	1stLt	3-IF-70
4)	0802.08.04	BRIEF A MANEUVER COMMANDER ON A MCFSS SITUATION REPORT AND ASSOCIATED AFU DATA						2	1stLt	3-IF-70
5)	0802.08.05	DEVELOP THE AUTOMATED SYSTEM SOFTWARE SETTINGS AS PART OF A MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN						2	1stLt	3-IF-71

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
6)	0802.08.06	BRIEF A MANEUVER COMMANDER ON THE COMMANDER'S CRITERIA PORTION OF THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN						2	1stLt	3-IF-71
7)	0802.08.07	BRIEF A MANEUVER COMMANDER ON THE MISSION PROCESSING SEQUENCE		X				2	1stLt	3-IF-72
8)	0802.08.08	DEVELOP ATI CRITERIA AS PART OF THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN	X	X				2	Capt	3-IF-72
9)	0802.08.09	ADVISE A MANEUVER COMMANDER ON THE ATI CRITERIA CONTAINED WITHIN THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN	X	X				2	Capt	3-IF-73
10)	0802.08.10	DEVELOP FIRE PLANNING CRITERIA AS PART OF THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN	X	X				2	Capt	3-IF-73
11)	0802.08.11	ADVISE A MANEUVER COMMANDER ON THE FIRE PLANNING CRITERIA CONTAINED WITHIN THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN	X	X				2	Capt	3-IF-74
12)	0802.08.12	INTEGRATE THE MCFSS ENCLOSURE WITHIN AN ARTILLERY FIRES PLAN	X	X				2	Capt	3-IF-74
13)	0802.08.13	PLAN MODIFICATIONS TO STANDARD MCFSS NET ARCHITECTURE TO SUPPORT A CHANGE IN TASK ORGANIZATION AND/OR ARTILLERY TACTICAL MISSION	X	X				2	Capt	3-IF-75
14)	0802.08.14	PLAN THE EXECUTION OF JUMP OPERATIONS WITHIN AN AMPHIBIOUS SCENARIO	X	X				2	Capt	3-IF-75
15)	0802.08.15	PLAN THE ALLOCATION OF RESOURCES TO SUSTAIN MCFSS TRAINING	X	X				2	Capt	3-IF-76
DUTY AREA 09 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS)										
1)	0802.09.01	DIRECT THE ESTABLISHMENT OF A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)		X				2	1stLt	3-IF-76
2)	0802.09.02	DIRECT THE ESTABLISHMENT OF A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)		X				2	1stLt	3-IF-77
3)	0802.09.03	DIRECT EXIT PROCEDURES		X				2	1stLt	3-IF-78
4)	0802.09.04	PLAN A COMMUNICATIONS CONFIGURATION		X				2	1stLt	3-IF-78
5)	0802.09.05	PLAN A DATA DISTRIBUTION SCHEME		X				2	1stLt	3-IF-79
6)	0802.09.06	SUPERVISE THE ENTRY OF A PLANNED COMMUNICATIONS CONFIGURATION		X				2	1stLt	3-IF-79
7)	0802.09.07	SUPERVISE THE IMPLEMENTATION OF A PLANNED COMMUNICATIONS CONFIGURATION		X				2	1stLt	3-IF-80
8)	0802.09.08	SUPERVISE THE ENTRY OF THE DISTRIBUTION DATA		X				2	1stLt	3-IF-80
9)	0802.09.09	SUPERVISE FSTDs DATABASE INPUT		X				2	1stLt	3-IF-81
10)	0802.09.10	ESTABLISH TARGET GUIDANCE		X				2	1stLt	3-IF-81
11)	0802.09.11	ESTABLISH FIRE SUPPORT ATTACK GUIDANCE		X				2	1stLt	3-IF-81
12)	0802.09.12	ESTABLISH UNIT AND SENSOR GUIDANCE		X				2	1stLt	3-IF-82
13)	0802.09.13	ESTABLISH FIELD ARTILLERY ATTACK GUIDANCE		X				2	1stLt	3-IF-82
14)	0802.09.14	ESTABLISH COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCE		X				2	1stLt	3-IF-83
15)	0802.09.15	ESTABLISH MISCELLANEOUS GUIDANCE		X				2	1stLt	3-IF-83
16)	0802.09.16	DIRECT ESTABLISHMENT OF INTERVENTION POINT DATA		X				2	1stLt	3-IF-84
17)	0802.09.17	SUPERVISE TARGET REPORT PROCESSING		X				2	1stLt	3-IF-84
18)	0802.09.18	SUPERVISE FIRE REQUEST PROCESSING		X				2	1stLt	3-IF-85
19)	0802.09.19	DEVELOP A SCHEDULE OF FIRES		X				2	1stLt	3-IF-85
20)	0802.09.20	SUPERVISE THE IMPLEMENTATION OF A PLANNED SITUATION INTO CURRENT		X				2	1stLt	3-IF-86
21)	0802.09.21	PLAN UNIT MOVEMENT		X				2	1stLt	3-IF-86
22)	0802.09.22	PLAN CONTINUITY OF OPERATIONS (CONOPS)		X				2	1stLt	3-IF-87
23)	0802.09.23	SUPERVISE CONTINUITY OF OPERATIONS (CONOPS) EXECUTION		X				2	1stLt	3-IF-87
24)	0802.09.24	DIRECT THE CREATION OF A TRIGGER EVENT		X				2	1stLt	3-IF-88
25)	0802.09.25	DIRECT ACTIONS TAKEN ON A TRIGGERED EVENT BEING TRIPPED		X				2	1stLt	3-IF-88

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 10 - MAINTENANCE										
1)	0802.10.01	DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT	X	X	X			2	2ndLt	3-IF-89
DUTY AREA 11 - LOGISTICS/SUPPLY/COMBAT SERVICE SUPPORT										
1)	0802.11.01	COORDINATE LOGISTICS			X			2	2ndLt	3-IF-90
2)	0802.11.02	MAINTAIN CLASS V SMALL-ARMS AMMO BASIC LOAD AND SUPPLIES						2	2ndLt	3-IF-91
3)	0802.11.03	SUPERVISE THE PICKUP AND DELIVERY OF DESIGNATED CLASSES OF SUPPLY						2	2ndLt	3-IF-91
DUTY AREA 12 - NBC DEFENSE OPERATIONS										
1)	0802.12.01	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA			X	X		6	2ndLt	3-IF-91
2)	0802.12.02	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT			X	X		6	2ndLt	3-IF-92
3)	0802.12.03	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT			X	X		6	2ndLt	3-IF-93
4)	0802.12.04	SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR NUCLEAR ATTACK			X			6	2ndLt	3-IF-94
DUTY AREA 13 - EMBARKATION										
1)	0802.13.01	SUPERVISE EMBARKATION			X			6	2ndLt	3-IF-95
DUTY AREA 14 - PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)										
1)	0802.14.01	SUPERVISE THE PERFORMANCE OF THE SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)	X	X		X		2	2ndLt	3-IF-95
2)	0802.14.02	SUPERVISE THE CHANGE OF THE MEMORY BATTERY	X	X		X		2	2ndLt	3-IF-96
3)	0802.14.03	SUPERVISE THE PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE	X	X		X		2	2ndLt	3-IF-96
4)	0802.14.04	VERIFY ERRORS CAUSING PLGR WARNING DISPLAYS	X	X		X		2	2ndLt	3-IF-97
5)	0802.14.05	SUPERVISE THE PERFORMANCE OF NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)	X	X		X		2	2ndLt	3-IF-98
6)	0802.14.06	VERIFY THE DETERMINATION OF A POSITION IN THE AVERAGING MODE	X	X		X		2	2ndLt	3-IF-98
7)	0802.14.07	SUPERVISE THE ENTRY OF A USER DEFINED DATUM	X	X		X		2	2ndLt	3-IF-99
8)	0802.14.08	SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS	X	X		X		2	2ndLt	3-IF-99
9)	0802.14.09	SUPERVISE THE PERFORMANCE OF PLGR TO PLGR OPERATIONS	X	X		X		2	2ndLt	3-IF-100
10)	0802.14.10	VERIFY THE LOADING OF CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT	X	X		X		2	2ndLt	3-IF-100
DUTY AREA 15 - TARGET AQUISITION/METEOROLOGICAL										
1)	0802.15.01	RECOMMEND PLANS, ORGANIZATION, AND EMPLOYMENT OF RADAR SET AN/TPQ-46	X	X				3	Capt	3-IF-101
2)	0802.15.02	SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS						3	Capt	3-IF-101
3)	0802.15.03	SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS						3	Capt	3-IF-102
4)	0802.15.04	SUPERVISE ACQUIRING AND RECORDING GROUND MET DATA						3	Capt	3-IF-103
MOS 0803, SURVEY, METEOROLOGICAL, AND RADAR OFFICER										
DUTY AREA 01 - SURVEY OPERATIONS										
1)	0803.01.01	ADVISE THE COMMANDER ON CURRENT SURVEY CAPABILITIES AND LIMITATIONS	X	X				3	WO1	3-IIF-1

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0803.01.02	SUPERVISE THE LOADING/MOVEMENT/EMPLACEMENT/DESTRUCTION OF SURVEY EQUIPMENT	X	X	X		3	WO1		3-IIF-1
3)	0803.01.03	PLAN A SURVEY OPERATION	X	X	X		3	WO1		3-IIF-2
4)	0803.01.04	SUPERVISE SURVEY OPERATIONS	X	X	X	X	3	WO1		3-IIF-2
5)	0803.01.06	VERIFY PREVENTIVE MAINTENANCE, CHECKS, AND SERVICES ON ALL SURVEY EQUIPMENT AND ASSIGNED VEHICLES	X	X	X		3	WO1		3-IIF-3
6)	0803.01.07	SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION	X	X	X	X	6	WO1		3-IIF-4
7)	0803.01.08	SUPERVISE THE CONDUCT OF A CRATER ANALYSIS	X	X	X		6	WO1		3-IIF-5
DUTY AREA 02 - MET OPERATIONS										
1)	0803.02.01	ADVISE THE COMMANDER ON CURRENT METEOROLOGICAL CAPABILITIES AND LIMITATIONS	X	X			3	WO1		3-IIF-5
2)	0803.02.02	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON ALL METEOROLOGICAL EQUIPMENT AND VEHICLES	X	X			3	WO1		3-IIF-5
3)	0803.02.03	EVALUATE SIGNIFICANT WEATHER CHANGES	X	X			3	WO1		3-IIF-6
4)	0803.02.04	SUPERVISE THE LOADING/MOVEMENT/EMPLACEMENT/DESTRUCTION OF METEOROLOGICAL EQUIPMENT	X	X			3	WO1		3-IIF-6
5)	0803.02.05	PLAN A MET SECTION'S FLIGHT SCHEDULE	X	X			3	WO1		3-IIF-7
6)	0803.02.06	MANAGE THE MET SECTION'S EXPENDABLE INVENTORY	X	X			3	WO1		3-IIF-7
7)	0803.02.08	PLAN A METEOROLOGICAL OPERATION	X	X			3	WO1		3-IIF-8
8)	0803.02.09	SUPERVISE METEOROLOGICAL OPERATIONS	X	X			3	WO1		3-IIF-8
DUTY AREA 03 - RADAR OPERATIONS										
1)	0803.03.01	ADVISE THE COMMANDER ON CURRENT RADAR CAPABILITIES AND LIMITATIONS	X	X			3	WO1		3-IIF-9
2)	0803.03.02	SUPERVISE RADAR OPERATIONS	X	X			3	WO1		3-IIF-9
3)	0803.03.03	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON ALL RADAR EQUIPMENT AND VEHICLES	X	X			3	WO1		3-IIF-10
4)	0803.03.04	SUPERVISE THE LOADING/MOVEMENT/EMPLACEMENT/DESTRUCTION OF RADAR EQUIPMENT	X	X			3	WO1		3-IIF-10
5)	0803.03.06	PLAN A RADAR OPERATION	X	X			3	WO1		3-IIF-11
6)	0803.03.07	SUPERVISE THE OPERATIONS OF THE TARGET PROCESSING CENTER (TPC)	X	X			3	WO1		3-IIF-11
DUTY AREA 04 - TARGETING										
1)	0803.04.01	PERFORM INTELLIGENCE PREPARATION OF THE BATTLEFIELD	X	X	X		3	WO1		3-IIF-12
2)	0803.04.02	SUPERVISE THE OPERATIONS OF THE TARGETING ELEMENT	X	X			3	WO1		3-IIF-12
3)	0803.04.03	RECOMMEND FIRE SUPPORT COORDINATION MEASURES AND COORDINATE FIRES	X	X			3	WO1		3-IIF-13
4)	0803.04.04	RECOMMEND THE PLANNING AND CONTROL OF TARGET ACQUISITION ASSETS	X	X			3	WO1		3-IIF-13
5)	0803.04.05	RECOMMEND THE TARGETING ARCHITECTURE FOR ASSIGNED COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE AUTOMATED SYSTEMS	X	X			3	WO1		3-IIF-14
6)	0803.04.06	CONDUCT TACTICAL AND OPERATIONAL TARGETING OPERATIONS IN MARINE EXPEDITIONARY BRIGADE (MEB), MARINE EXPEDITIONARY FORCE (MEF), AND JOINT TASK FORCE (JTF) LEVEL	X	X			3	CWO3		3-IIF-15

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
MOS 0811, FIELD ARTILLERY CANNONEER										
DUTY AREA 01 - CANNONEER										
1)	0811.01.01	MOUNT/DISMOUNT A MACHINEGUN ON A 5-TON TRUCK			X		2	Pvt		3-IIIF-1
2)	0811.01.02	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED			X	X	2	Pvt		3-IIIF-1
3)	0811.01.03	PREPARE A POSITION TO RECEIVE OR TO EMPLACE A HOWITZER	X	X	X		2	Pvt		3-IIIF-2
4)	0811.01.04	EMPLACE AND RECOVER THE COLLIMATOR	X	X	X		2	Pvt		3-IIIF-2
5)	0811.01.05	EMPLACE AND RECOVER THE AIMING POSTS	X	X	X		2	Pvt		3-IIIF-3
6)	0811.01.06	EMPLOY PROPER AMMUNITION STORAGE PROCEDURES ON VEHICLES AND IN THE HOWITZER POSITION	X	X			2	Pvt		3-IIIF-4
7)	0811.01.07	PREPARE SEPARATE-LOADING PROJECTILE FOR FIRING	X	X	X		2	Pvt		3-IIIF-4
8)	0811.01.08	PREPARE SEPARATE-LOADING PROPELLANT FOR FIRING	X	X	X		2	Pvt		3-IIIF-5
9)	0811.01.09	RESPOND TO FIRE COMMANDS	X	X			2	Pvt		3-IIIF-6
10)	0811.01.10	UNPACK THE M712/M823 PROJECTILE	X	X	X		6	Pvt		3-IIIF-7
11)	0811.01.11	PREPARE THE M712/M823 PROJECTILE FOR FIRING	X	X	X		6	Pvt		3-IIIF-8
12)	0811.01.12	UNLOAD THE M712/M823 PROJECTILE	X	X	X		6	Pvt		3-IIIF-8
13)	0811.01.13	REPACK THE M712/M823 PROJECTILE	X	X	X		6	Pvt		3-IIIF-9
14)	0811.01.14	COMMAND, "CHECK FIRING", WHEN AN UNSAFE CONDITION EXISTS	X	X	X		2	Pvt		3-IIIF-10
15)	0811.01.16	EMPLOY SECTION EQUIPMENT	X	X	X		2	Pvt		3-IIIF-11
16)	0811.01.17	GUIDE TRUCK/HOWITZER, USING HAND AND ARM SIGNALS	X	X	X		2	Pvt		3-IIIF-11
17)	0811.01.18	RECORD AND MAINTAIN FIRE MISSION DATA ON RECORD OF MISSIONS FIRED (DA FORM 4513)	X	X			2	Pvt		3-IIIF-11
18)	0811.01.19	SET UP AND MAINTAIN THE GUN DISPLAY UNIT (GDU)	X	X			2	Pvt		3-IIIF-12
19)	0811.01.20	MAINTAIN THE M94 MUZZLE VELOCITY SYSTEM (MVS)	X	X			2	Pvt		3-IIIF-12
20)	0811.01.21	PREPARE THE M94 MUZZLE VELOCITY SYSTEM (MVS) FOR OPERATION	X	X			2	Pvt		3-IIIF-13
21)	0811.01.22	DISASSEMBLE AND ASSEMBLE THE FIRING MECHANISM	X	X	X		2	Pvt		3-IIIF-13
22)	0811.01.23	DISASSEMBLE AND ASSEMBLE THE BREECHBLOCK	X	X	X		2	Pvt		3-IIIF-14
23)	0811.01.24	LOAD AND FIRE A PREPARED ROUND	X	X	X		2	Pvt		3-IIIF-14
24)	0811.01.25	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)	X	X	X		2	Pvt		3-IIIF-15
25)	0811.01.26	TAKE IMMEDIATE ACTION FOR MISFIRE	X	X	X		2	Pvt		3-IIIF-16
26)	0811.01.27	PERFORM PREFIRE CHECKS	X	X	X		2	Pvt		3-IIIF-16
DUTY AREA 02 - GUNNER/ASSISTANT GUNNER										
1)	0811.02.01	DESTROY A HOWITZER			X		6	Cpl		3-IIIF-17
2)	0811.02.02	TEST THE GUNNER'S QUADRANT			X		3	Sgt		3-IIIF-17
3)	0811.02.03	LAY FOR QUADRANT, USING THE GUNNER'S QUADRANT			X		2	Sgt		3-IIIF-17
4)	0811.02.04	MEASURE THE QUADRANT, USING THE GUNNER'S QUADRANT			X		2	Sgt		3-IIIF-17
5)	0811.02.05	LAY A HOWITZER BY RECIPROCAL LAY, USING M100-SERIES SIGHT			X	X	2	Sgt		3-IIIF-17
6)	0811.02.06	PREPARE A GUNNER'S REFERENCE CARD			X		2	Sgt		3-IIIF-19
7)	0811.02.07	PROCESS A FIRE MISSION WITH THE SECTION CHIEF'S ASSEMBLY (SCA) OF THE GUN DISPLAY UNIT (GDU)					2	Cpl		3-IIIF-20
8)	0811.02.08	PROCESS "CONTINUOUS FIRE", "FINAL PROTECTIVE FIRE", AND "SPECIAL INSTRUCTIONS" AND FIRE MISSION UPDATES WITH THE SECTION CHIEF'S ASSEMBLY (SCA) OF THE GUN DISPLAY UNIT (GDU)					2	Cpl		3-IIIF-20
9)	0811.02.09	TROUBLESHOOT THE GUN DISPLAY UNIT (GDU)					2	Cpl		3-IIIF-21
10)	0811.02.12	OPERATE THE MUZZLE VELOCITY SYSTEM (MVS)			X		2	Cpl		3-IIIF-21
11)	0811.02.13	LEAD A REACTION FORCE			X		2	Cpl		3-IIIF-22

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
12)	0811.02.14	ALIGN AIMING POSTS, USING M100-SERIES SIGHT			X		2	Sgt		3-IIIF-22
13)	0811.02.15	ALIGN COLLIMATOR, USING M100-SERIES SIGHT			X		2	Sgt		3-IIIF-23
14)	0811.02.16	LAY A HOWITZER FOR DEFLECTION, USING M100-SERIES SIGHT			X	X	2	Sgt		3-IIIF-23
15)	0811.02.17	REFER THE PIECE			X	X	2	Sgt		3-IIIF-24
16)	0811.02.18	REPORT THE CORRECT DEFLECTION			X	X	2	Sgt		3-IIIF-25
17)	0811.02.19	LAY THE M198 HOWITZER FOR INITIAL DIRECTION OF FIRE			X	X	2	Sgt		3-IIIF-25
18)	0811.02.20	CONDUCT DIRECT FIRE WITH THE M100-SERIES PANORAMIC TELESCOPE (M137)			X		2	Sgt		3-IIIF-26
19)	0811.02.21	BORESIGHT WITH THE AIMING CIRCLE			X		2	Sgt		3-IIIF-27
20)	0811.02.22	PREPARE A RANGE CARD FOR A HOWITZER			X		2	Sgt		3-IIIF-28
21)	0811.02.23	SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT			X		2	Sgt		3-IIIF-28
22)	0811.02.24	MEASURE BORESIGHT ERROR			X		2	Sgt		3-IIIF-29
23)	0811.02.25	BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)			X		2	Cpl		3-IIIF-29
24)	0811.02.26	LAY THE HOWITZER FOR QUADRANT, USING THE M18 OR M17 FIRE CONTROL QUADRANT			X		2	Cpl		3-IIIF-30
25)	0811.02.27	MEASURE THE QUADRANT, USING THE M17 OR M18 FIRE CONTROL QUADRANT			X		2	Cpl		3-IIIF-30
26)	0811.02.28	SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE			X		2	Cpl		3-IIIF-31
27)	0811.02.29	LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP)			X	X	2	Cpl		3-IIIF-31
28)	0811.02.30	CHECK BORESIGHT OF THE PANORAMIC TELESCOPE, USING THE ALIGNMENT DEVICE			X		2	Sgt		3-IIIF-32
29)	0811.02.31	ADJUST THE EQUILIBRATORS			X		3	Cpl		3-IIIF-32
30)	0811.02.32	PERFORM FIRE CONTROL ALIGNMENT TESTS			X		3	Sgt		3-IIIF-33
31)	0811.02.33	TROUBLESHOOT COMMON MALFUNCTIONS					3	Cpl		3-IIIF-33
32)	0811.02.34	BORE SIGHT THE M137 PANORAMIC TELESCOPE USING A DISTANT AIMING POINT (DAP)			X		2	Sgt		3-IIIF-34

DUTY AREA 03 - SECTION CHIEF

1)	0811.03.01	PREPARE A HOWITZER FOR FIRING			X		2	SSgt		3-IIIF-34
2)	0811.03.02	MEASURE THE ANGLE OF SITE TO CREST AND THE PIECE TO CREST RANGE			X		2	SSgt		3-IIIF-35
3)	0811.03.04	DETERMINE WHETHER A HOWITZER IS SAFE TO FIRE			X		2	SSgt		3-IIIF-36
4)	0811.03.05	COMPUTE DATA FOR SWEEP AND ZONE FIRE MISSION			X		6	SSgt		3-IIIF-37
5)	0811.03.06	ISSUE FIRE COMMAND FOR DIRECT FIRE MISSION			X		2	SSgt		3-IIIF-37
6)	0811.03.07	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON A 5-TON TRUCK			X		1	SSgt		3-IIIF-38
7)	0811.03.10	PREPARE A HOWITZER SECTION FOR HELICOPTER DISPLACEMENT			X		6	SSgt		3-IIIF-39
8)	0811.03.12	SUPERVISE DIRECT FIRE, USING THE TWO-MAN TWO-SIGHT TECHNIQUE (M198)			X		6	SSgt		3-IIIF-39
9)	0811.03.14	SUPERVISE DIRECT FIRE, USING THE ONE-MAN ONE-SIGHT TECHNIQUE			X		6	SSgt		3-IIIF-39
10)	0811.03.15	PREPARE A HOWITZER FOR TRAVEL			X		2	SSgt		3-IIIF-41
11)	0811.03.16	PREPARE A HOWITZER TO SHOOT OUT OF NORMAL TRAVERSE LIMITS			X		2	SSgt		3-IIIF-41
12)	0811.03.17	SUPERVISE THE PREPARATION OF A PROJECTILE FOR FIRING			X		2	SSgt		3-IIIF-42
13)	0811.03.18	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE HOWITZER			X		1	SSgt		3-IIIF-42
14)	0811.03.19	VERIFY FIRE CONTROL ALIGNMENT TESTS			X		3	SSgt		3-IIIF-43
15)	0811.03.20	VERIFY MAINTENANCE ON THE BREECH MECHANISM AND THE COUNTERBALANCE			X		3	SSgt		3-IIIF-43
16)	0811.03.21	PREPARE THE HOWITZER FOR EXTERNAL HELICOPTER LIFT			X		6	SSgt		3-IIIF-44

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 04 - PLATOON SERGEANT/LOCAL SECURITY CHIEF										
1)	0811.04.01	CONDUCT BATTERY CREW SERVED WEAPONS TRAINING			X			2	SSgt	3-IIIF-44
2)	0811.04.02	SET UP AND RECOVER THE M2A2 AIMING CIRCLE						2	SSgt	3-IIIF-45
3)	0811.04.03	LAY THE FIRING BATTERY				X		2	SSgt	3-IIIF-46
4)	0811.04.04	MEASURE THE ORIENTING ANGLE (OA)				X		2	SSgt	3-IIIF-46
5)	0811.04.05	MEASURE THE AZIMUTH OF THE LINE OF FIRE				X		2	SSgt	3-IIIF-47
6)	0811.04.06	COMPUTE MINIMUM QUADRANT ELEVATION (MIN QE)						2	SSgt	3-IIIF-48
7)	0811.04.07	MEASURE DISTANCE, USING THE SUBTENSE METHOD						2	SSgt	3-IIIF-48
8)	0811.04.08	DECLINATE THE AIMING CIRCLE						2	SSgt	3-IIIF-49
9)	0811.04.09	DECLINATE THE M2 COMPASS						2	SSgt	3-IIIF-50
10)	0811.04.10	MEASURE THE VERTICAL ANGLE (VA)						2	SSgt	3-IIIF-50
11)	0811.04.11	MAINTAIN THE M2A2 AIMING CIRCLE						2	SSgt	3-IIIF-51
12)	0811.04.12	CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION			X	X		2	SSgt	3-IIIF-51
13)	0811.04.13	PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS			X			6	SSgt	3-IIIF-53
14)	0811.04.14	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS			X			6	SSgt	3-IIIF-54
15)	0811.04.15	PERFORM SHELL FRAGMENT ANALYSIS			X			6	SSgt	3-IIIF-55
16)	0811.04.16	ESTABLISH AN ADVANCE PARTY			X			2	SSgt	3-IIIF-55
17)	0811.04.17	PLAN THE DEFENSE OF A FIELD ARTILLERY UNIT			X			2	SSgt	3-IIIF-56
DUTY AREA 05 - BATTERY GUNNERY SERGEANT										
1)	0811.05.01	EMPLOY THE HASTY SURVEY TECHNIQUES FOR DIRECTIONAL AND POSITIONAL CONTROL			X	X		2	GySgt	3-IIIF-57
2)	0811.05.02	PREPARE THE EXECUTIVE OFFICER'S (XO'S) REPORT						2	GySgt	3-IIIF-58
3)	0811.05.03	DISPOSE OF UNUSED POWDER INCREMENTS						2	GySgt	3-IIIF-58
4)	0811.05.04	LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY				X		2	GySgt	3-IIIF-59
5)	0811.05.05	UPDATE UNIT COMMANDER'S RECORD (NAVMC 10558A)			X			2	GySgt	3-IIIF-60
6)	0811.05.06	DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT			X			2	GySgt	3-IIIF-60
7)	0811.05.07	SUPERVISE A BATTERY DISPLACEMENT			X			2	GySgt	3-IIIF-61
8)	0811.05.08	SUPERVISE A TACTICAL ROAD MARCH			X	X		2	GySgt	3-IIIF-62
9)	0811.05.09	DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT			X			2	GySgt	3-IIIF-63
10)	0811.05.10	COORDINATE LOGISTICS			X			2	GySgt	3-IIIF-64
11)	0811.05.11	MAINTAIN CLASS V SMALL-ARMS AMMO BASIC LOAD AND SUPPLIES						2	GySgt	3-IIIF-64
12)	0811.05.12	SUPERVISE THE PICKUP AND DELIVERY OF DESIGNATED CLASSES OF SUPPLY						2	GySgt	3-IIIF-65
13)	0811.05.13	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA			X	X		6	GySgt	3-IIIF-65
14)	0811.05.14	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT			X	X		6	GySgt	3-IIIF-66
15)	0811.05.15	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT			X	X		6	GySgt	3-IIIF-67
16)	0811.05.16	SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR A NUCLEAR ATTACK			X	X		6	GySgt	3-IIIF-68
17)	0811.05.17	SUPERVISE EMBARKATION			X			6	GySgt	3-IIIF-69
18)	0811.05.18	SUPERVISE AMMUNITION MANAGEMENT ON THE GUN LINE						2	GySgt	3-IIIF-70
19)	0811.05.19	DIRECT SUSTAINMENT AND/OR SKILL PROGRESSION TRAINING FOR THE BATTERY			X	X		1	GySgt	3-IIIF-70
20)	0811.05.20	ASSIST IN TRAINING PLAN DEVELOPMENT AND IMPLEMENTATION						1	GySgt	3-IIIF-72
21)	0811.05.21	SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING			X			2	GySgt	3-IIIF-73

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 06 - M101A1 HOWITZER										
1)	0811.06.01	BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)						2	Cpl	3-IIIF-73
2)	0811.06.02	BORESIGHTING THE DIRECT FIRE ELBOW TELESCOPE, USING A TESTING TARGET						2	LCpl	3-IIIF-74
3)	0811.06.03	LAY THE HOWITZER FOR QUADRANT, USING THE FIRE CONTROL QUADRANT						2	LCpl	3-IIIF-74
4)	0811.06.04	MEASURE THE QUADRANT, USING THE FIRE CONTROL QUADRANT						2	LCpl	3-IIIF-75
5)	0811.06.05	SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE						2	LCpl	3-IIIF-75
6)	0811.06.06	DISASSEMBLE AND ASSEMBLE THE BREECHLOCK						2	Pvt	3-IIIF-75
7)	0811.06.07	DISASSEMBLE AND ASSEMBLE THE FIRING LOCK						2	Pvt	3-IIIF-76
8)	0811.06.08	LOAD AND FIRE A PREPARED ROUND						2	Pvt	3-IIIF-76
9)	0811.06.09	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE M101A1 HOWITZER				X		2	Pvt	3-IIIF-77
10)	0811.06.10	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)				X		2	Cpl	3-IIIF-78
11)	0811.06.11	PERFORM PREFIRE CHECKS						2	Pvt	3-IIIF-78
12)	0811.06.12	PERFORM FIRE CONTROL ALIGNMENT TESTS						3	LCpl	3-IIIF-79
13)	0811.06.13	VERIFY FIRE CONTROL ALIGNMENT TESTS						3	Sgt	3-IIIF-79
14)	0811.06.14	TAKE IMMEDIATE ACTION FOR MISFIRE						2	Pvt	3-IIIF-80
15)	0811.06.15	ADJUST THE EQUILIBRATOR						3	LCpl	3-IIIF-80
16)	0811.06.16	TROUBLESHOOT COMMON MALFUNCTIONS OF THE HOWITZER						2	LCpl	3-IIIF-80
17)	0811.06.17	PREPARE THE HOWITZER AND AMMUNITION FOR EXTERNAL LOAD						6	Cpl	3-IIIF-81
18)	0811.06.18	ESTABLISH A STANDARD ANGLE						3	LCpl	3-IIIF-81
19)	0811.06.19	VERIFY BORESIGHT, USING THE STANDARD ANGLE METHOD						2	LCpl	3-IIIF-81
20)	0811.06.20	EMPLOY DEFLECTION BOARD IN ASSAULT FIRE PROCEDURES						2	LCpl	3-IIIF-82
21)	0811.06.21	LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP) (AIMING POINT-DEFLECTION METHOD)					X	2	LCpl	3-IIIF-82
22)	0811.06.22	LAY A HOWITZER FOR INITIAL DIRECTION OF FIRE, USING M12-SERIES SIGHT					X	2	Pvt	3-IIIF-83
23)	0811.06.23	LAY A HOWITZER BY RECIPROCAL LAY, USING M12-SERIES SIGHT					X	2	Cpl	3-IIIF-84
24)	0811.06.24	ALIGN COLLIMATOR, USING M12-SERIES SIGHT						2	Pvt	3-IIIF-85
25)	0811.06.25	ALIGN AIMING POSTS, USING THE M12-SERIES SIGHT						2	Pvt	3-IIIF-85
26)	0811.06.26	BORESIGHT THE M12-SERIES PANORAMIC TELESCOPE, USING A DISTANT AIMING POINT (DAP)						2	Cpl	3-IIIF-86
27)	0811.06.27	BORESIGHT THE M12-SERIES PANORAMIC TELESCOPE, USING A TESTING TARGET						2	Cpl	3-IIIF-86
28)	0811.06.28	LAY A HOWITZER FOR DEFLECTION, USING M12-SERIES SIGHT						2	Pvt	3-IIIF-87
29)	0811.06.29	SUPERVISE DIRECT FIRE WITH THE M101A1 HOWITZER					X	2	SSgt	3-IIIF-87

MOS 0840, NAVAL SURFACE FIRE SUPPORT PLANNER

DUTY AREA 01 - NAVAL GUNFIRE PLANNING OPERATIONS

1)	0840.01.02	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE GENERAL MISSION AND CHARACTERISTICS OF NAVAL GUNFIRE (NGF) EMPLOYED IN AN AMPHIBIOUS OPERATION	X	X	X			6	Capt	3-IVF-1
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SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0840.01.03	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE CONSIDERATIONS OF EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT FOR AN AMPHIBIOUS OPERATION	X	X	X			6	Capt	3-IVF-1
3)	0840.01.04	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE ORGANIZATION FOR COMMAND, CONTROL AND EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT PLANNING FOR AN AMPHIBIOUS OPERATION	X	X	X			6	Capt	3-IVF-2
4)	0840.01.05	PREPARE AND BRIEF A NAVAL GUNFIRE (NGF) ESTIMATE OF SUPPORTABILITY	X	X	X			3	Capt	3-IVF-3
5)	0840.01.06	PREPARE AND BRIEF AN OVERALL NAVAL GUNFIRE (NGF) SUPPORT REQUIREMENTS LETTER	X	X	X			3	Capt	3-IVF-4
6)	0840.01.07	PREPARE AND BRIEF A DETAILED NAVAL GUNFIRE (NGF) SUPPORT REQUIREMENTS LETTER	X	X	X			3	Capt	3-IVF-5
7)	0840.01.08	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND COMMANDER LANDING FORCE (CLF) ON NAVAL GUNFIRE (NGF) AND GENERAL FIRE SUPPORT COORDINATION TECHNIQUES TO BE EMPLOYED DURING THE ASHORE PHASE OF THE OPERATION	X	X	X			3	Capt	3-IVF-6
8)	0840.01.09	WRITE A NAVAL GUNFIRE (NGF) SUPPORT PLAN TAB TO AN OPERATIONS PLAN/ORDER	X	X	X			3	Capt	3-IVF-7
DUTY AREA 02 - FIRE SUPPORT COORDINATION CENTER (FSCC) OPERATIONS										
1)	0840.02.01	INFORM SUPPORTED MANEUVER COMMANDER OF THE NAVAL GUNFIRE (NGF) TACTICAL MISSIONS AND CORRESPONDING PLAN TO SUPPORT THE SCHEME OF MANEUVER	X	X	X			3	Capt	3-IVF-8
2)	0840.02.02	BRIEF A MANEUVER COMMANDER ON THE FIRE SUPPORT PLAN			X			3	Capt	3-IVF-8
3)	0840.02.03	ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)	X	X	X			3	Capt	3-IVF-9
4)	0840.02.04	CONSOLIDATE/PROCESS SPOTTER'S LISTS OF TARGETS						3	Capt	3-IVF-9
5)	0840.02.05	PREPARE/SUBMIT A LIST OF TARGETS						3	Capt	3-IVF-10
6)	0840.02.06	PREPARE A TARGET LIST WORKSHEET AND SCHEDULING WORKSHEETS	X	X				3	Capt	3-IVF-10
7)	0840.02.07	PREPARE A TARGET BULLETIN (TARBUL)	X	X				3	Capt	3-IVF-11
8)	0840.02.08	PRODUCE AN ATTACK GUIDANCE (AG) MATRIX	X	X				3	Capt	3-IVF-11
9)	0840.02.09	PREPARE THE FIRE SUPPORT EXECUTION MATRIX	X	X				3	Capt	3-IVF-12
10)	0840.02.10	PREPARE THE ATF TARGET LIST	X	X				3	Capt	3-IVF-12
11)	0840.02.11	PREPARE A HIGH-PAYOFF TARGET LIST (HPTL)						3	Capt	3-IVF-13
12)	0840.02.12	PREPARE A TARGET PRECEDENCE LIST						3	Capt	3-IVF-13
13)	0840.02.13	SUPERVISE THE OPERATIONS OF A FIRE SUPPORT COORDINATION CENTER (FSCC)						3	Capt	3-IVF-13
14)	0840.02.14	DEVELOP A QUICK FIRE SUPPORT PLAN						3	Capt	3-IVF-15
15)	0840.02.15	POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)						3	Capt	3-IVF-16
16)	0840.02.16	PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)						3	Capt	3-IVF-16
17)	0840.02.17	LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM						3	Capt	3-IVF-17
18)	0840.02.18	EVALUATE TARGETING INFORMATION						3	Capt	3-IVF-17
19)	0840.02.19	COORDINATE FIRES ACROSS BOUNDARIES						3	Capt	3-IVF-17
20)	0840.02.20	ANALYZE TARGETS TO DETERMINE PRECEDENCE, TYPES, AND QUANTITIES OF FIRE TO BE USED FOR ENGAGING TARGETS						3	Capt	3-IVF-18

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
21)	0840.02.21	PASS FIRE SUPPORT INFORMATION TO LOWER, ADJACENT, AND HIGHER FIRE SUPPORT COORDINATION CENTERS						3	Capt	3-IVF-19
22)	0840.02.22	MONITOR/COORDINATE REQUESTS FOR NAVAL SURFACE FIRE SUPPORT (NSFS)						3	Capt	3-IVF-19
23)	0840.02.23	PLAN/COORDINATE FIRE SUPPORT TO SUPPRESS ENEMY AIR DEFENSES						3	Capt	3-IVF-20
MOS 0842, FIELD ARTILLERY RADAR OPERATOR										
DUTY AREA 01 - COMMUNICATIONS										
1)	0842.01.01	ESTABLISH, ENTER, AND LEAVE A RADIO NET	X	X	X			3	Pvt	3-VF-1
2)	0842.01.02	IDENTIFY ELECTRONIC COUNTERMEASURES (ECM) AND IMPLEMENT ELECTRONIC COUNTER-COUNTERMEASURES	X	X				3	Pvt	3-VF-1
3)	0842.01.03	PREPARE AND OPERATE SINGARS SERIES RADIOS	X	X	X			3	Pvt	3-VF-2
DUTY AREA 02 - INSTALLATION OF THE RADAR SET AN/TPQ-46										
1)	0842.02.01	EMPLACE THE RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-3
2)	0842.02.02	BORESIGHT THE RADAR SET AN/TPQ-46 ANTENNA	X	X				3	Pvt	3-VF-3
3)	0842.02.03	GATHER INITIALIZATION DATA FOR RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-4
4)	0842.02.04	PREPARE THE RADAR SET AN/TPQ-46 COMMON SHELTER FOR OPERATION	X	X				3	Pvt	3-VF-4
5)	0842.02.05	PERFORM THE RADAR SET AN/TPQ-46 STARTUP PROCEDURES	X	X				3	Pvt	3-VF-5
DUTY AREA 03 - RADAR OPERATIONS										
1)	0842.03.01	INITIALIZE THE RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-5
2)	0842.03.02	INSTALL A NEW MAP ON THE WEAPONS LOCATION UNIT (WLU) MAP DRUM FOR RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-6
3)	0842.03.03	LOAD THE DIGITAL TERRAIN MAP FOR RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-6
4)	0842.03.04	ENTER/DELETE ZONES ON RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-6
5)	0842.03.05	PERFORM DIGITAL COMMUNICATIONS	X	X				3	Pvt	3-VF-7
6)	0842.03.06	OPERATE THE RADAR SET AN/TPQ-46 IN THE HOSTILE MODE	X	X				3	Pvt	3-VF-8
7)	0842.03.07	RECALL/DELETE HOSTILE WEAPONS LOCATIONS ON RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-9
8)	0842.03.08	PREPARE THE FRIENDLY FIRE DATA WORKSHEETS FOR RADAR SET AN/TPQ-46	X	X				3	Pvt	3-VF-9
9)	0842.03.09	OPERATE THE RADAR SET AN/TPQ-46 IN THE FRIENDLY FIRE MODE	X	X				3	Pvt	3-VF-9
10)	0842.03.10	ADJUST INDIRECT FIRE WITH THE RADAR SET AN/TPQ-46						3	Pvt	3-VF-10
11)	0842.03.11	OBSERVE REGISTRATION FOR INDIRECT FIRE WITH THE RADAR SET AN/TPQ-46						3	Pvt	3-VF-10
12)	0842.03.12	DESTROY RADAR EQUIPMENT	X	X				3	Pvt	3-VF-11
DUTY AREA 04 - PREPARATION FOR MOVEMENT										
1)	0842.04.01	PERFORM THE RADAR SET AN/TPQ-46 SHUTDOWN PROCEDURES	X	X				3	Pvt	3-VF-11
2)	0842.04.02	PREPARE THE RADAR SET AN/TPQ-46 FOR MOVEMENT BY TRUCK	X	X				3	Pvt	3-VF-12
3)	0842.04.03	PREPARE THE RADAR SET AN/TPQ-46 FOR MOVEMENT BY HELICOPTER						12	Cpl	3-VF-12

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 05 - PREVENTIVE MAINTENANCE CHECKS AND SERVICES										
1)	0842.05.01	PERFORM OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE RADAR SET AN/TPQ-46	X	X	X		3	Pvt		3-VF-13
2)	0842.05.02	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON GENERATOR SET MEP-813A	X	X	X		3	Pvt		3-VF-13
3)	0842.05.03	PERFORM OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON SINGGARS SERIES RADIO	X	X	X		3	Pvt		3-VF-13
MOS 0844, FIELD ARTILLERY FIRE CONTROL MAN										
DUTY AREA 01 - BATTERY COMPUTER SYSTEM (BCS) GENERAL										
1)	0844.01.01	PREPARE THE BATTERY COMPUTER SYSTEM (BCS) FOR OPERATION	X	X			2	Pvt		3-VIF-1
2)	0844.01.02	DESTROY THE BATTERY COMPUTER SYSTEM (BCS)					2	Pvt		3-VIF-1
DUTY AREA 02 - BATTERY COMPUTER SYSTEM (BCS) INITIALIZATION AND DATA BASE										
1)	0844.02.01	INITIALIZE THE BATTERY COMPUTER SYSTEM (BCS) AND CONSTRUCT AND RECORD A DATA BASE	X	X			2	Pvt		3-VIF-1
2)	0844.02.02	LOAD AND UPDATE A PREVIOUSLY RECORDED DATA BASE USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	Pvt		3-VIF-2
3)	0844.02.03	PERFORM OPERATOR AND ORGANIZATIONAL MAINTENANCE ON THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	LCpl		3-VIF-2
DUTY AREA 03 - BATTERY COMPUTER SYSTEM (BCS) COMMUNICATIONS AND ERROR MESSAGES										
1)	0844.03.01	PROCESS PLAIN TEXT INFORMATION USING THE SYS;PTM MESSAGE	X	X			2	Pvt		3-VIF-3
2)	0844.03.02	TRANSMIT PLAIN TEXT INFORMATION USING THE SYS;PTM MESSAGE	X	X			2	Pvt		3-VIF-3
3)	0844.03.03	TAKE CORRECTIVE ACTION ON ERROR AND WARNING MESSAGES USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	Pvt		3-VIF-4
DUTY AREA 04 - BATTERY COMPUTER SYSTEM (BCS) FIRE MISSION PROCESSING										
1)	0844.04.01	PROCESS AN AREA FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	Pvt		3-VIF-4
DUTY AREA 05 - BATTERY COMPUTER SYSTEM (BCS) REGISTRATIONS AND REGISTRATION CORRECTIONS										
1)	0844.05.01	PROCESS A PRECISION REGISTRATION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	Pvt		3-VIF-4
2)	0844.05.02	UPDATE REGISTRATION CORRECTIONS USING METEOROLOGICAL INFORMATION WITH THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	Pvt		3-VIF-5
3)	0844.05.03	UPDATE REGISTRATION CORRECTIONS USING SURVEY INFORMATION WITH THE BATTERY COMPUTER SYSTEM (BCS)					2	Cpl		3-VIF-5
4)	0844.05.04	PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI)/RADAR REGISTRATION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	Pvt		3-VIF-6
DUTY AREA 06 - BATTERY COMPUTER SYSTEM (BCS) SPECIAL SITUATIONS										
1)	0844.06.01	PROCESS REPLOT USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	Pvt		3-VIF-6

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0844.06.02	DERIVE A GRAPHICAL FIRING TABLE (GFT) SETTING AND TERRAIN GUN POSITION CORRECTIONS (TGPCS) USING THE BATTERY COMPUTER SYSTEM (BCS)						2	Cpl	3-VIF-7
3)	0844.06.03	INITIATE/PROCESS CHECK FIRING AND CANCEL CHECK FIRING WITH THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-7
4)	0844.06.04	PROCESS A FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-7
5)	0844.06.05	FIRE A TARGET FROM THE FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-8
6)	0844.06.06	PROCESS A TIME ON TARGET (TOT) FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-8
7)	0844.06.07	ESTABLISH OR MODIFY THE H-HOUR IN THE FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-9
8)	0844.06.08	ASSIGN TARGETS TO KNOWN POINT FILE WHEN ALREADY IN TARGET FILE USING THE BATTERY COMPUTER SYSTEM (BCS)						2	LCpl	3-VIF-9
9)	0844.06.09	PROCESS AN ON-CALL FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-9
10)	0844.06.10	PROCESS A PRIORITY MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-10
11)	0844.06.11	PROCESS A FIREFINDER FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X				2	Pvt	3-VIF-10
12)	0844.06.12	PROCESS A QUICK SMOKE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)						2	Pvt	3-VIF-11
13)	0844.06.13	PROCESS LASER MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)						2	Pvt	3-VIF-11
DUTY AREA 07 - BACK-UP COMPUTER SYSTEM (BUCS) GENERAL										
1)	0844.07.01	PREPARE THE BACK-UP COMPUTER SYSTEM (BUCS) FOR OPERATION						2	Cpl	3-VIF-11
2)	0844.07.02	PERFORM MAINTENANCE ON BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL						2	Cpl	3-VIF-12
DUTY AREA 08 - BACK-UP COMPUTER SYSTEM (BUCS) INITIALIZATION AND DATA BASE										
1)	0844.08.01	INITIALIZE THE BACK-UP COMPUTER SYSTEM (BUCS) AND CONSTRUCT A DATA BASE						2	Cpl	3-VIF-12
2)	0844.08.02	LOAD AND UPDATE A PREVIOUSLY RECORDED BACK-UP COMPUTER SYSTEM (BUCS) DATA BASE						2	Cpl	3-VIF-13
DUTY AREA 09 - BACK-UP COMPUTER SYSTEM (BUCS) FIRE MISSION PROCESSING										
1)	0844.09.01	PROCESS AN AREA FIRE MISSION USING BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-13
DUTY AREA 10 - BACK-UP COMPUTER SYSTEM (BUCS) REGISTRATIONS AND REGISTRATION CORRECTIONS										
1)	0844.10.01	PROCESS A PRECISION REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-13
2)	0844.10.02	PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI) REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-14
3)	0844.10.03	PROCESS A RADAR REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-14
4)	0844.10.04	PERFORM THE CONCURRENT MET PROCEDURE USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-15
5)	0844.10.05	UPDATE REGISTRATION CORRECTIONS WITH SURVEY DATA USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-15
6)	0844.10.06	COMPUTE BATTERY COMPUTER SYSTEM (BCS) TO BUCS RESIDUALS USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-16

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 11 - BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL SITUATIONS										
1)	0844.11.01	PROCESS AN ILLUMINATION MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-16
2)	0844.11.02	PROCESS A SMOKE MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-17
DUTY AREA 12 - SURVEY										
1)	0844.12.01	MEASURE DISTANCES WITH THE DISTOMAT DI-3000	X	X				2	Pvt	3-VIF-17
2)	0844.12.02	PERFORM DI-3000 (DISTOMAT)/THEODOLITE PARALLELISM TEST AND ADJUSTMENT	X	X				6	Cpl	3-VIF-18
3)	0844.12.03	MEASURE A HORIZONTAL AND VERTICAL ANGLE WITH A T-2E THEODOLITE	X	X				2	Pvt	3-VIF-18
4)	0844.12.04	MAKE OBSERVATIONS FOR THE ARTY ASTRO METHOD	X	X				2	Pvt	3-VIF-19
5)	0844.12.05	PERFORM THEODOLITE TEST AND ADJUSTMENTS	X	X				6	Cpl	3-VIF-19
6)	0844.12.06	PERFORM MAINTENANCE ON A T-2E THEODOLITE	X	X				6	Cpl	3-VIF-20
7)	0844.12.07	RECORD FIELD NOTES FOR A HORIZONTAL AND VERTICAL ANGLE	X	X				2	Pvt	3-VIF-20
8)	0844.12.08	RECORD FIELD NOTES FOR ASTRONOMIC OBSERVATIONS	X	X				2	Pvt	3-VIF-21
9)	0844.12.09	RECORD FIELD NOTES FOR THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X				2	Pvt	3-VIF-21
10)	0844.12.10	PERFORM COMPUTATIONS OF AZIMUTHS AND DISTANCES FROM COORDINATES	X	X				2	Pvt	3-VIF-22
11)	0844.12.11	PERFORM CONVERSION AND TRANSFORMATION OF COORDINATES AND AZIMUTH	X	X				2	Pvt	3-VIF-23
12)	0844.12.12	PERFORM COMPUTATIONS OF UNIVERSAL TRAVERSE MERCATOR (UTM) CONVERGENCE	X	X				2	Pvt	3-VIF-23
13)	0844.12.13	PERFORM TRIG TRAVERSE COMPUTATIONS	X	X				2	Pvt	3-VIF-24
14)	0844.12.14	PERFORM TRAVERSE COMPUTATIONS	X	X				2	Pvt	3-VIF-24
15)	0844.12.15	PERFORM COMPUTATIONS OF ASTRONOMIC OBSERVATIONS	X	X				2	Pvt	3-VIF-25
16)	0844.12.16	PERFORM INTERSECTION COMPUTATIONS	X	X				2	Pvt	3-VIF-25
17)	0844.12.17	PERFORM THREE POINT RESECTION COMPUTATIONS	X	X				2	Pvt	3-VIF-25
18)	0844.12.18	PERFORM DATUM TO DATUM TRANSFORMATION COMPUTATIONS	X	X				2	Pvt	3-VIF-26
19)	0844.12.19	IDENTIFY STARS FOR ASTRONOMIC OBSERVATION	X	X				2	Pvt	3-VIF-26
20)	0844.12.20	INITIALIZE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X				2	Pvt	3-VIF-27
21)	0844.12.21	UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB OVER A SURVEY CONTROL POINT (SCP)	X	X				2	Pvt	3-VIF-28
22)	0844.12.22	UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE OVER A SURVEY CONTROL POINT (SCP) (AUTOREFLECTION)	X	X				2	Pvt	3-VIF-28
23)	0844.12.23	UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH PLUMB BOB OVER A STATION LOCATED BY GLOBAL POSITIONING SYSTEM (GPS)	X	X		X		2	Pvt	3-VIF-29
24)	0844.12.24	PERFORM A TWO POSITION MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB	X	X				2	Pvt	3-VIF-30
25)	0844.12.25	PERFORM A MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE	X	X				2	Pvt	3-VIF-30
26)	0844.12.26	PERFORM AN OPTICAL AZIMUTH MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE	X	X				2	Pvt	3-VIF-31
27)	0844.12.27	EXTRACT ADJUSTED DATA FROM THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X				2	Pvt	3-VIF-31
28)	0844.12.28	PERFORM OPERATOR'S MAINTENANCE ON THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X				2	Pvt	3-VIF-32

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
29)	0844.12.29	PERFORM CONVERSION TO COMMON CONTROL PROCEDURES		X	X		2	Pvt		3-VIF-32
30)	0844.12.30	MARK SURVEY STATIONS		X	X		2	Pvt		3-VIF-33
31)	0844.12.31	DECLINATE AN M2A2 AIMING CIRCLE		X	X	X	2	Pvt		3-VIF-33
32)	0844.12.32	DETERMINE A GRID AZIMUTH WITH A DECLINATED M2A2 AIMING CIRCLE		X	X	X	2	Pvt		3-VIF-34
33)	0844.12.33	PERFORM CRATER ANALYSIS WITH AN M2A2 AIMING CIRCLE		X	X		6	Cpl		3-VIF-34
34)	0844.12.34	PERFORM SHELL FRAGMENT ANALYSIS		X	X		6	Cpl		3-VIF-35
35)	0844.12.35	PERFORM OPERATOR'S MAINTENANCE ON AN M2A2 AIMING CIRCLE		X	X		6	Cpl		3-VIF-36
36)	0844.12.36	CONDUCT AN ADJUST FIRE MISSION		X	X	X	6	LCpl		3-VIF-36
37)	0844.12.37	CONDUCT AN IMMEDIATE SUPPRESSION MISSION		X	X	X	6	LCpl		3-VIF-37
38)	0844.12.38	UPDATE THE EMPHEMERIS FILE IN GP SURVEY		X	X		2	Pvt		3-VIF-38
39)	0844.12.39	PRINT GLOBAL POSITIONING SYSTEM (GPS) OBSERVATION WINDOWS USING PLANNING SOFTWARE		X	X		2	Pvt		3-VIF-38
40)	0844.12.40	ESTABLISH AN ABSOLUTE POINT		X	X		2	Pvt		3-VIF-39
41)	0844.12.41	PERFORM A REAL TIME KINEMATIC-ON THE FLY (RTK/OTF) SURVEY		X	X		2	Pvt		3-VIF-39
42)	0844.12.42	PERFORM DATUM TRANSFORMATIONS WITH THE TDC2M		X	X		2	Pvt		3-VIF-40
43)	0844.12.43	PERFORM A FAST STATIC, STATIC, AND KINEMATIC SURVEY		X	X		2	Pvt		3-VIF-40
44)	0844.12.44	POST PROCESSED DATA FROM A FAST STATIC, STATIC, AND KINEMATIC NETWORK SURVEY		X	X		2	Cpl		3-VIF-40
45)	0844.12.45	ADJUST A FAST STATIC, STATIC, AND KINEMATIC SURVEY NETWORK		X	X		2	Cpl		3-VIF-41
46)	0844.12.46	DETERMINE USER DEFINED DATA AND ELLIPSOID DATUM		X	X		2	Pvt		3-VIF-41
47)	0844.12.47	CONDUCT RECONNAISSANCE FOR ARTILLERY UNITS		X	X	X	2	Sgt		3-VIF-42
DUTY AREA 13 - FIRING CHARTS										
1)	0844.13.01	CONSTRUCT A SURVEYED FIRING CHART		X	X		2	Pvt		3-VIF-42
2)	0844.13.02	PLOT TARGETS AND DETERMINE AND ANNOUNCE CHART DATA		X	X		2	Pvt		3-VIF-43
3)	0844.13.03	CONSTRUCT AN EMERGENCY FIRING CHART					2	Sgt		3-VIF-43
DUTY AREA 14 - MANUAL SITE										
1)	0844.14.01	DETERMINE VERTICAL INTERVAL AND COMPUTE AND ANNOUNCE ANGLE OF SITE, SITE, AND VERTICAL ANGLE		X	X		2	Pvt		3-VIF-44
DUTY AREA 15 - MANUAL FIRE MISSION PROCESSING										
1)	0844.15.01	APPLY VALUES FROM TABULAR FIRING TABLES (TFTS) ADDENDUMS		X	X		2	Pvt		3-VIF-44
2)	0844.15.02	DETERMINE LOW ANGLE FIRING DATA USING THE GRAPHICAL FIRING TABLE (GFT) WITH OR WITHOUT A GFT SETTING APPLIED		X	X		2	Pvt		3-VIF-45
3)	0844.15.03	DETERMINE AND RECORD FIRING DATA AND ANNOUNCE FIRE COMMANDS		X	X		2	Pvt		3-VIF-45
4)	0844.15.04	PROCESS A LOW ANGLE FIRE MISSION FOR SHELL HIGH EXPLOSIVE (HE)		X	X		2	Pvt		3-VIF-46
5)	0844.15.05	PROCESS A LOW ANGLE FIRE MISSION FOR A NON-STANDARD WEIGHT PROJECTILE/WP		X	X		2	Pvt		3-VIF-46
6)	0844.15.06	DETERMINE HIGH ANGLE FIRING DATA (Q & VT)		X	X		2	Pvt		3-VIF-46
7)	0844.15.07	PROCESS A LOW ANGLE ILLUMINATION FIRE MISSION (1 GUN, 2 GUN RANGE AND LATERAL SPREAD, COORDINATED ILLUMINATION) (TABULAR FIRING TABLES (TFT)/GRAPHICAL FIRING TABLE (GFT))					2	Pvt		3-VIF-47
8)	0844.15.08	PROCESS A HIGH ANGLE ILLUMINATION MISSION USING A TABULAR FIRING TABLE (TFT)					2	Cpl		3-VIF-47

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
9)	0844.15.09	PROCESS A FIRE MISSION FOR IMMEDIATE SUPPRESSION/SMOKE						2	Cpl	3-VIF-48
10)	0844.15.10	PROCESS A FIRE MISSION FOR SHELL DPICM	X	X				2	Cpl	3-VIF-48
11)	0844.15.11	COMPOSE AND RECORD THE MESSAGE TO OBSERVER	X	X				2	Pvt	3-VIF-49
DUTY AREA 16 - MANUAL REGISTRATIONS										
1)	0844.16.01	PROCESS A PRECISION REGISTRATION AND DETERMINE A GRAPHICAL FIRING TABLE (GFT) SETTING AND TOTAL CORRECTIONS	X	X				2	Pvt	3-VIF-49
2)	0844.16.02	CONSTRUCT A GRAPHICAL FIRING TABLE (GFT) SETTING AND APPLY TOTAL CORRECTIONS FROM A REGISTRATION	X	X				2	Pvt	3-VIF-50
3)	0844.16.03	PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI) REGISTRATION						2	LCpl	3-VIF-50
4)	0844.16.04	DETERMINE TRANSFER LIMITS AND DETERMINE A GRAPHICAL FIRING TABLE (GFT) SETTING AND DEFLECTION CORRECTIONS						2	Sgt	3-VIF-50
5)	0844.16.05	DETERMINE TOTAL CORRECTIONS AND CONSTRUCT A GRAPHICAL FIRING TABLE (GFT) SETTING FROM A DPICM-SR REGISTRATION						2	Cpl	3-VIF-51
6)	0844.16.06	UPDATE A GRAPHICAL FIRING TABLE (GFT) SETTING WHEN TRANSFERRING FROM A MAP SPOT OR OBSERVED FIRING CHART						2	Sgt	3-VIF-51
7)	0844.16.07	PROCESS A RADAR REGISTRATION						2	Cpl	3-VIF-51
8)	0844.16.08	PROCESS A SECOND LOT REGISTRATION						2	Cpl	3-VIF-52
DUTY AREA 17 - VALIDATE METEOROLOGICAL MESSAGE										
1)	0844.17.01	VERIFY METEOROLOGICAL (MET) MESSAGES						2	Sgt	3-VIF-52
DUTY AREA 18 - MUZZLE VELOCITY										
1)	0844.18.01	VERIFY THE M94 VELOCIMETER DATA						2	Cpl	3-VIF-53
2)	0844.18.02	RECORD THE HISTORICAL MUZZLE VELOCITY (FIRST LOT CALIBRATION) AND INFER A SECOND LOT CALIBRATION USING THE MUZZLE VELOCITY RECORD (DA FORM 4982-R)						2	Cpl	3-VIF-53
3)	0844.18.03	DETERMINE MUZZLE VELOCITY VARIANCES (MVVS) BASED ON SHOOTING STRENGTH AND PROPELLANT EFFICIENCIES						2	Sgt	3-VIF-53
DUTY AREA 19 - MANUAL SPECIAL SITUATIONS										
1)	0844.19.01	PROCESS A QUICK SMOKE MISSION						2	Cpl	3-VIF-54
2)	0844.19.02	PROCESS A FIRE MISSION FOR SHELL ROCKET ASSISTED PROJECTILE (RAP)						2	Cpl	3-VIF-54
3)	0844.19.03	PROCESS A LASER FIRE MISSION						2	Cpl	3-VIF-55
4)	0844.19.04	PROCESS A RADAR ADJUST FIRE MISSION						3	Cpl	3-VIF-55
5)	0844.19.05	PROCESS A DESTRUCTION MISSION						3	Cpl	3-VIF-55
6)	0844.19.06	PROCESS A SWEEP AND ZONE FIRE MISSION						3	Sgt	3-VIF-56
7)	0844.19.07	PROCESS AN AERIAL OBSERVER MISSION (RANGING ROUNDS)						3	Sgt	3-VIF-56
8)	0844.19.08	REPLOT TARGETS AND DETERMINE REPLOT DATA (FZ QUICK AND VT)						3	Sgt	3-VIF-56
9)	0844.19.09	DETERMINE AND ANNOUNCE REFINEMENT DATA FOR FUZE TIME						3	Sgt	3-VIF-57
10)	0844.19.10	MAINTAIN FIRE COMMANDS FOR PREPLANNED/PRIORITY TARGETS						3	Cpl	3-VIF-57
DUTY AREA 20 - MANUAL FIRE PLANNING										
1)	0844.20.01	MAINTAIN A TACTICAL SITUATION MAP						2	LCpl	3-VIF-57
2)	0844.20.02	PROCESS FORWARD OBSERVER'S (FO) LISTS OF TARGETS						2	LCpl	3-VIF-58
3)	0844.20.03	UPDATE A TARGET LIST						2	LCpl	3-VIF-58
4)	0844.20.04	PROCESS A FIRE PLAN						2	Sgt	3-VIF-58

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
5)	0844.20.05	MAINTAIN A FIRE DIRECTION CENTER (FDC) JOURNAL						2	LCpl	3-VIF-59
DUTY AREA 21 - TARGET PRODUCTION CENTER OPERATIONS										
1)	0844.21.01	PREPARE/MAINTAIN A TARGET PRODUCTION MAP AND OVERLAYS			X			2	PFC	3-VIF-59
2)	0844.21.02	PREPARE/MAINTAIN THE TARGET CARD FILE			X			2	PFC	3-VIF-59
3)	0844.21.03	EVALUATE TARGETING INFORMATION			X			2	Cpl	3-VIF-60
4)	0844.21.04	MONITOR THE OPERATION OF ALL COUNTERBATTERY RADAR (CBR) PLATOON ASSETS			X			2	Sgt	3-VIF-61
5)	0844.21.05	RECOMMEND COVERAGE OF THE AREA OF OPERATIONS BY COUNTERBATTERY RADAR (CBR) ASSETS			X			2	Sgt	3-VIF-61
DUTY AREA 23 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) INITIALIZATION										
1)	0844.23.01	PREPARE THE LIGHT-WEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STCP) FOR OPERATIONS	X	X				2	Pvt	3-VIF-62
2)	0844.23.02	INPUT LIGHT-WEIGHT COMPUTER UNIT (LCU) INITIALIZATION DATA	X	X				2	Pvt	3-VIF-62
DUTY AREA 24 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) COMMUNICATIONS										
1)	0844.24.01	ESTABLISH IFSAS COMMUNICATIONS PARAMETERS	X	X				2	Pvt	3-VIF-63
2)	0844.24.02	COMMUNICATE USING IFSAS	X	X				2	Pvt	3-VIF-63
DUTY AREA 25 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL DATABASE CONSTRUCTION										
1)	0844.25.01	INPUT DATA IN THE IFSAS SUPPORT PROGRAM	X	X				2	Pvt	3-VIF-63
2)	0844.25.02	INPUT DATA IN THE AMMUNITION AND FIRE UNIT PROGRAM	X	X				2	Pvt	3-VIF-64
DUTY AREA 26 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL FIRE CONTROL										
1)	0844.26.01	INPUT MODIFICATIONS TO THE COMMANDER'S CRITERIA FILE						2	Cpl	3-VIF-65
2)	0844.26.02	PROCESS A FIRE MISSION REQUEST						2	Cpl	3-VIF-65
DUTY AREA 27 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) NONNUCLEAR FIRE PLANNING										
1)	0844.27.01	COMPUTE A NON-NUCLEAR FIRE PLAN						2	Cpl	3-VIF-66
2)	0844.27.02	COMPUTE A PLANNED FAMILY OF SCATTERABLE MINES (FASCAM) MINE FIELD WITH IFSAS						2	Cpl	3-VIF-67
DUTY AREA 28 - AN/PSN-11 PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)										
1)	0844.28.01	PERFORM SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)			X		X	2	Pvt	3-VIF-67
2)	0844.28.02	CHANGE THE MEMORY BATTERY IN THE AN/PSN-11 (PLGR)			X		X	2	Pvt	3-VIF-68
3)	0844.28.03	APPLY PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE FOR THE AN/PSN-11 (PLGR)			X		X	2	Pvt	3-VIF-68
4)	0844.28.04	IDENTIFY ERRORS CAUSING AN/PSN-11 (PLGR) WARNING DISPLAYS			X		X	2	Pvt	3-VIF-69
5)	0844.28.05	PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)			X		X	2	Pvt	3-VIF-70
6)	0844.28.06	DETERMINE A POSITION WITH THE AN/PSN-11 (PLGR) IN THE AVERAGING MODE			X		X	2	Pvt	3-VIF-70
7)	0844.28.07	ENTER A USER DEFINED DATUM IN THE AN/PSN-11 (PLGR)			X		X	2	Pvt	3-VIF-71
8)	0844.28.08	PERFORM DATUM TRANSFORMATIONS WITH THE AN/PSN-11 (PLGR)			X		X	2	Pvt	3-VIF-71
9)	0844.28.09	PERFORM PLGR TO PLGR OPERATIONS			X		X	2	Pvt	3-VIF-71

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
10)	0844.28.10	LOAD CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT WITH THE AN/PSN-11 (PLGR)		X		X	2	Pvt		3-VIF-72
DUTY AREA 29 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) OPERATIONS										
1)	0844.29.01	ESTABLISH A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)		X			2	Pvt		3-VIF-72
2)	0844.29.02	ESTABLISH A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)					2	Pvt		3-VIF-73
3)	0844.29.03	PERFORM EXIT PROCEDURES		X			2	Pvt		3-VIF-74
4)	0844.29.04	ENTER A PLANNED COMMUNICATIONS CONFIGURATION		X			2	Pvt		3-VIF-74
5)	0844.29.05	IMPLEMENT A COMMUNICATIONS CONFIGURATION		X			2	Pvt		3-VIF-75
6)	0844.29.06	ENTER DISTRIBUTION DATA		X			2	Pvt		3-VIF-75
7)	0844.29.07	INPUT FSTDs DATABASE UPDATES		X			2	Pvt		3-VIF-76
8)	0844.29.08	ENTER TARGET GUIDANCES		X			2	Pvt		3-VIF-76
9)	0844.29.09	ENTER FIRE SUPPORT ATTACK GUIDANCES					2	Pvt		3-VIF-76
10)	0844.29.10	ENTER UNIT AND SENSOR GUIDANCES		X			2	Pvt		3-VIF-77
11)	0844.29.11	ENTER FIELD ARTILLERY (FA) ATTACK GUIDANCES		X			2	Pvt		3-VIF-77
12)	0844.29.12	ENTER COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES		X			2	Pvt		3-VIF-78
13)	0844.29.13	ENTER MISCELLANEOUS GUIDANCES		X			2	Pvt		3-VIF-78
14)	0844.29.14	ENTER INTERVENTION POINT DATA		X			2	Pvt		3-VIF-79
15)	0844.29.15	PROCESS TARGET REPORTS		X			2	Pvt		3-VIF-79
16)	0844.29.16	PROCESS A FIRE REQUEST		X			2	Pvt		3-VIF-80
17)	0844.29.17	BUILD A SCHEDULE OF FIRES		X			2	Pvt		3-VIF-80
18)	0844.29.18	IMPLEMENT A PLANNED SITUATION INTO CURRENT		X			2	Pvt		3-VIF-81
19)	0844.29.19	ENTER UNIT MOVEMENT INFORMATION		X			2	Pvt		3-VIF-81
20)	0844.29.20	PERFORM CONTINUOUS OPERATIONS (CONOPS)		X			2	Pvt		3-VIF-82
21)	0844.29.21	CREATE A TRIGGER EVENT		X			2	Pvt		3-VIF-82
22)	0844.29.22	TAKE ACTIONS UPON A TRIGGERED EVENT BEING TRIPPED		X			2	Pvt		3-VIF-83

MOS 0845, NAVAL GUNFIRE SPOTTER

DUTY AREA 01 - NAVAL GUNFIRE SPOTTING OPERATIONS

1)	0845.01.01	SUPERVISE THE EMPLOYMENT OF A NAVAL GUNFIRE (NGF) SPOT TEAM			X		2	2ndLt		3-VIIF-1
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DUTY AREA 02 - NGF SPOTTING PROCEDURES

1)	0845.02.01	LOCATE A TARGET BY GRID COORDINATES	X	X	X		2	2ndLt		3-VIIF-2
2)	0845.02.02	LOCATE A TARGET BY POLAR PLOT	X	X	X		2	2ndLt		3-VIIF-2
3)	0845.02.03	LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	X	X	X		2	2ndLt		3-VIIF-3
4)	0845.02.04	MEASURE ANGULAR DEVIATION WITH YOUR HAND	X	X	X		2	2ndLt		3-VIIF-3
5)	0845.02.05	CONDUCT AN ADJUST FIRE MISSION	X	X	X		2	2ndLt		3-VIIF-4
6)	0845.02.06	CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION	X	X		X	2	2ndLt		3-VIIF-5
7)	0845.02.07	CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-5
8)	0845.02.08	CONDUCT A DANGER CLOSE FIRE MISSION	X	X	X	X	2	2ndLt		3-VIIF-6
9)	0845.02.09	REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-7
10)	0845.02.10	CONDUCT AN ILLUMINATION MISSION	X	X	X	X	2	2ndLt		3-VIIF-7
11)	0845.02.11	CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-8
12)	0845.02.12	CONDUCT SIMULTANEOUS MISSIONS WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-9
13)	0845.02.13	CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-9
14)	0845.02.14	CONDUCT A PRE-ARMED CALIBRATION FIRE (PACFIRE)					2	2ndLt		3-VIIF-10
15)	0845.02.15	OPERATE AN AN/PRC-104 RADIO SET	X	X	X		2	2ndLt		3-VIIF-11
16)	0845.02.16	INSTALL AN/MRC-138 RADIO SET			X		3	2ndLt		3-VIIF-11

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
17)	0845.02.17	OPERATE AN AN/MRC-138 RADIO SET			X		3	2ndLt		3-VIIF-12
18)	0845.02.18	PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET			X		2	2ndLt		3-VIIF-12
19)	0845.02.19	EMPLOY THE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)					2	2ndLt		3-VIIF-13
20)	0845.02.20	MAINTAIN COMMUNICATIONS EQUIPMENT	X	X	X		2	2ndLt		3-VIIF-13
21)	0845.02.21	DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN					2	2ndLt		3-VIIF-14
22)	0845.02.22	PREPARE A VISIBILITY DIAGRAM	X	X			2	2ndLt		3-VIIF-14
23)	0845.02.23	CONDUCT A DESTRUCTION MISSION					2	2ndLt		3-VIIF-15
24)	0845.02.24	OPERATE THE AN/PRC-119	X	X	X		2	2ndLt		3-VIIF-15
25)	0845.02.25	SELECT AND OCCUPY AN OBSERVATION POST (OP)	X	X	X		2	2ndLt		3-VIIF-16
26)	0845.02.26	SUPERVISE AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) EQUIPPED OBSERVATION POST (OP)	X	X			2	2ndLt		3-VIIF-17
27)	0845.02.27	PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	X	X	X		2	2ndLt		3-VIIF-17
28)	0845.02.28	DETERMINE DIRECTION TO TWO TARGETS	X	X	X		2	2ndLt		3-VIIF-18
29)	0845.02.29	CONSTRUCT A TERRAIN SKETCH	X	X	X		2	2ndLt		3-VIIF-18
30)	0845.02.30	CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION	X	X	X	X	2	2ndLt		3-VIIF-19

DUTY AREA 03 - FIRE SUPPORT PLANNING

1)	0845.03.01	ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCMS)	X	X			2	2ndLt		3-VIIF-19
2)	0845.03.02	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE GENERAL MISSION AND CHARACTERISTICS OF NAVAL GUNFIRE (NGF) EMPLOYED IN AN AMPHIBIOUS OPERATION	X	X			6	2ndLt		3-VIIF-20
3)	0845.03.03	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE CONSIDERATIONS OF EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT FOR AN AMPHIBIOUS OPERATION	X	X			6	2ndLt		3-VIIF-21

DUTY AREA 04 - MAP READING AND LAND NAVIGATION

1)	0845.04.01	DECLINATE AN M2 COMPASS USING THE FIELD EXPEDIENT METHOD	X	X	X		2	2ndLt		3-VIIF-21
2)	0845.04.02	ORIENT A MAP USING A DECLINATED M2 COMPASS (CORE)	X	X	X		2	2ndLt		3-VIIF-22
3)	0845.04.03	LOCATE YOUR POSITION DURING A TERRAIN WALK	X	X	X		2	2ndLt		3-VIIF-22
4)	0845.04.04	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED			X		2	2ndLt		3-VIIF-22
5)	0845.04.05	LOCATE POSITIONS IN A MOBILE ENVIRONMENT	X	X	X		2	2ndLt		3-VIIF-23
6)	0845.04.06	DETERMINE LOCATION WITH THE AN/GVS-5 LASER RANGE FINDER	X	X			2	2ndLt		3-VIIF-24
7)	0845.04.07	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO KNOWN POINTS	X	X			2	2ndLt		3-VIIF-24
8)	0845.04.08	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST					2	2ndLt		3-VIIF-25
9)	0845.04.09	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS					2	2ndLt		3-VIIF-25
10)	0845.04.10	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING SELF-LOCATION PROCEDURE	X	X			2	2ndLt		3-VIIF-26
11)	0845.04.11	LOCATE POSITION ON A MAP OR GROUND BY RESECTION	X	X	X		2	2ndLt		3-VIIF-26

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
12)	0845.04.12	DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP	X	X	X		2	2ndLt		3-VIIF-27
13)	0845.04.13	DETERMINE A POSITION WITH THE AN/PSN-11 (PLGR) IN THE AVERAGING MODE	X	X	X	X	2	2ndLt		3-VIIF-28
14)	0845.04.14	PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)	X	X	X	X	2	2ndLt		3-VIIF-29

MOS 0847, ARTILLERY METEOROLOGICAL MAN

DUTY AREA 01 - METEOROLOGICAL GENERAL

1)	0847.01.01	EMPLACE THE METEOROLOGICAL MEASURING SET (MMS) SHELTER	X	X			3	Pvt		3-VIIIF-1
2)	0847.01.02	POWER UP/DOWN THE METEOROLOGICAL MEASURING SET (MMS)	X	X			3	Pvt		3-VIIIF-1
3)	0847.01.03	ENTER RADIOSONDE CALIBRATION DATA INTO THE MARWIN	X	X			3	Pvt		3-VIIIF-2
4)	0847.01.04	ESTABLISH DIGITAL COMMUNICATIONS	X	X			3	Pvt		3-VIIIF-2
5)	0847.01.05	PREPARE EQUIPMENT FOR ELECTRONIC FLIGHT	X	X			3	Pvt		3-VIIIF-2
6)	0847.01.06	DETERMINE AND RECORD SURFACE DATA USING THE AN/TMQ-50 SURFACE MET SENSOR	X	X			3	Pvt		3-VIIIF-4
7)	0847.01.07	DETERMINE AND RECORD SURFACE DATA	X	X			3	Pvt		3-VIIIF-4
8)	0847.01.08	SET UP, LEVEL, AND ORIENT A MET THEODOLITE	X	X			3	Pvt		3-VIIIF-5
9)	0847.01.09	SET UP, LEVEL, AND ORIENT A ELECTRONIC MET THEODOLITE	X	X			3	Pvt		3-VIIIF-5
10)	0847.01.10	PERFORM TRACKING WITH A MET THEODOLITE	X	X			3	Pvt		3-VIIIF-5
11)	0847.01.11	RECORD A METEOROLOGICAL MESSAGE	X	X			3	Pvt		3-VIIIF-6
12)	0847.01.12	PERFORM AND RECORD A LIMITED SURFACE OBSERVATION (SUPREP)	X	X			3	Pvt		3-VIIIF-7
13)	0847.01.13	DETERMINE AND RECORD LOCATION AND HEIGHT OF THE METEOROLOGICAL STATION					3	Cpl		3-VIIIF-7
14)	0847.01.14	IDENTIFY SIGNIFICANT WEATHER CHANGES	X	X			3	Pvt		3-VIIIF-8
15)	0847.01.15	PREPARE AND RELEASE A METEOROLOGICAL MEASURING SET (MMS) BALLOON TRAIN	X	X			3	Pvt		3-VIIIF-8
16)	0847.01.16	EMPLACE, ALIGN, AND STOW THE RADIO DIRECTION FINDER (RDF) ANTENNA	X	X			3	Pvt		3-VIIIF-9
17)	0847.01.17	ESTABLISH TRACKING MODES FOR AN ELECTRONIC FLIGHT	X	X			3	Pvt		3-VIIIF-10
18)	0847.01.18	MONITOR AN ELECTRONIC FLIGHT (NAVAID OR RDF)	X	X			3	Pvt		3-VIIIF-10
19)	0847.01.19	PREPARE A LOADING PLAN FOR A METEOROLOGICAL (MET) SECTION				X	3	Sgt		3-VIIIF-11
20)	0847.01.20	PLAN THE DESTRUCTION OF THE METEOROLOGICAL (MET) SECTION'S EQUIPMENT AND MATERIAL TO PREVENT ENEMY USE					3	Sgt		3-VIIIF-11
21)	0847.01.21	DESTROY METEOROLOGICAL EQUIPMENT	X	X			3	LCpl		3-VIIIF-12
22)	0847.01.22	PERFORM OPERATOR'S MAINTENANCE CHECKS AND SERVICES ON METEOROLOGICAL EQUIPMENT	X	X	X		3	Pvt		3-VIIIF-12

MOS 0848, FIELD ARTILLERY OPERATIONS MAN

DUTY AREA 01 - FIRE DIRECTION CENTER (FDC) GENERAL

1)	0848.01.01	APPLY THE PRINCIPLE OF ARTILLERY BALLISTICS TO ARTILLERY FIRES	X	X			2	SSgt		3-IXF-1
2)	0848.01.02	DETERMINE THE BATTERY FIRE ORDER STANDING OPERATING PROCEDURES (SOP) AND FIRE COMMAND STANDARDS	X	X			2	SSgt		3-IXF-1
3)	0848.01.03	DETERMINE THE AMOUNT AND TYPE OF MUNITIONS NEEDED TO ACHIEVE SUPPRESSION, NEUTRALIZATION, OR DESTRUCTION OF TARGETS					2	SSgt		3-IXF-2
4)	0848.01.04	DETERMINE AND ANNOUNCE THE BATTERY FIRE ORDER	X	X			2	SSgt		3-IXF-2
5)	0848.01.05	SUPERVISE THE CONSTRUCTION AND MAINTENANCE OF A TACTICAL SITUATION MAP	X	X			2	SSgt		3-IXF-3

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
6)	0848.01.06	PREPARE THE FIRE DIRECTION CENTER (FDC) TO CONDUCT FIRE MISSIONS INTO A SECONDARY ZONE (ZONE TO ZONE TRANSFORMATION)					2	SSgt		3-IXF-3
7)	0848.01.07	SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS					2	SSgt		3-IXF-4
8)	0848.01.08	APPLY THE FIVE REQUIREMENTS FOR ACCURATE PREDICTED FIRE IN A COMBAT ENVIRONMENT	X	X			2	SSgt		3-IXF-4
9)	0848.01.09	APPLY THE FIVE STEPS TO IMPROVE FIRING DATA IN A COMBAT ENVIRONMENT	X	X			2	SSgt		3-IXF-4
10)	0848.01.10	TROUBLESHOOT ERRORS IN THE FIRING DATA SOLUTION	X	X			2	SSgt		3-IXF-5
11)	0848.01.11	SUPERVISE THE MAINTENANCE OF FIRE DIRECTION EQUIPMENT			X		2	SSgt		3-IXF-5
12)	0848.01.12	SUPERVISE THE DESTRUCTION OF THE BATTERY COMPUTER SYSTEM (BCS)					2	SSgt		3-IXF-6
DUTY AREA 02 - BATTERY COMPUTER SYSTEM (BCS) INITIALIZATION AND DATABASE										
1)	0848.02.01	SUPERVISE THE PREPARATION OF THE BATTERY COMPUTER SYSTEM (BCS) FOR OPERATION	X	X			2	SSgt		3-IXF-6
2)	0848.02.02	SUPERVISE THE INITIALIZATION OF THE BATTERY COMPUTER SYSTEM (BCS) AND THE CONSTRUCTION AND RECORDING OF A DATA BASE	X	X			2	SSgt		3-IXF-7
3)	0848.02.03	SUPERVISE THE LOADING AND UPDATE OF A PREVIOUSLY RECORDED DATA BASE USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-7
4)	0848.02.04	SUPERVISE THE SHUT-DOWN OF THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-8
DUTY AREA 03 - BATTERY COMPUTER SYSTEM (BCS) COMMUNICATIONS AND ERROR MESSAGES										
1)	0848.03.01	SUPERVISE ESTABLISHMENT OF COMMUNICATIONS WITH THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-8
2)	0848.03.02	SUPERVISE THE PROCESSING OF PLAIN TEXT INFORMATION USING THE SYS;PTM MESSAGE OF THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-9
3)	0848.03.03	SUPERVISE THE PROCESSING OF DIGITAL COMMUNICATION MESSAGE FORMAT USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-9
4)	0848.03.04	DIRECT CORRECTIVE ACTION ON ERROR AND WARNING MESSAGES USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-10
DUTY AREA 04 - BATTERY COMPUTER SYSTEM (BCS) FIRE MISSION PROCESSING										
1)	0848.04.01	SUPERVISE THE PROCESSING OF FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-10
2)	0848.04.02	VERIFY REPLOT PROCEDURES WITH THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-11
3)	0848.04.03	SUPERVISE THE PROCESSING OF A CHECK FIRING AND CANCEL CHECK FIRING COMMAND USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-11
4)	0848.04.04	SUPERVISE THE PROCESSING OF A FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-12
5)	0848.04.05	SUPERVISE THE FIRING OF A TARGET FROM THE FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-12
6)	0848.04.06	SUPERVISE THE RECORDING OF PREVIOUSLY STORED TARGETS IN THE BCS;TKPSUM MESSAGE AS KNOWN POINTS, USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-13
7)	0848.04.07	SUPERVISE THE PROCESSING OF ILLUMINATION FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-13

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
8)	0848.04.08	SUPERVISE THE PROCESSING OF A COORDINATED ILLUMINATION FIRE MISSION USING BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-14
DUTY AREA 05 - BATTERY COMPUTER SYSTEM (BCS) SPECIAL SITUATIONS										
1)	0848.05.01	SUPERVISE THE ESTABLISHMENT, PROCESSING, ENDING, AND DELETION OF COPPERHEAD PRIORITY FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-15
2)	0848.05.02	SUPERVISE THE ESTABLISHMENT, PROCESSING, AND DELETION OF A FINAL PROTECTIVE FIRE (FPF) MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-16
3)	0848.05.03	SUPERVISE THE PROCESSING OF A QUICK SMOKE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-17
4)	0848.05.04	SUPERVISE THE PROCEDURES OF LASER FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-17
5)	0848.05.05	SUPERVISE THE DETERMINATION OF FIRING DATA AND PROCESSING FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-18
6)	0848.05.06	SUPERVISE THE PROCESSING OF RADAR FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-19
7)	0848.05.07	SUPERVISE THE PROCESSING OF AERIAL OBSERVER FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-20
DUTY AREA 06 - BATTERY COMPUTER SYSTEM (BCS) REGISTRATIONS AND REGISTRATION CORRECTIONS										
1)	0848.06.01	DETERMINE APPROPRIATE ACTIONS TO IMPROVE THE ACCURACY OF FIRING DATA USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-20
2)	0848.06.02	SUPERVISE THE PROCESSING OF A PRECISION REGISTRATION FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-21
3)	0848.06.03	SUPERVISE THE PROCESSING OF A HIGH BURST/MEAN-POINT-OF-IMPACT (HB/MPI)/LASER MEAN-POINT-OF-IMPACT/RADAR REGISTRATION FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-22
4)	0848.06.04	SUPERVISE THE UPDATING OF THE AFU;REG MESSAGE FOR CONCURRENT NON STANDARD CONDITIONS	X	X			2	SSgt		3-IXF-23
5)	0848.06.05	SUPERVISE THE DETERMINATION OF A GRAPHICAL FIRING TABLE (GFT) SETTING AND TERRAIN GUN POSITION CORRECTIONS (TGPCS) USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-23
6)	0848.06.06	SUPERVISE THE LOCATING OF AN OBSERVER BY TRILATERATION, TRIANGULATION OR RESECTION, USING THE BATTERY COMPUTER SYSTEM (BCS)					2	SSgt		3-IXF-24
DUTY AREA 07 - BACK-UP COMPUTER SYSTEM (BUCS) GENERAL										
1)	0848.07.01	SUPERVISE THE PREPARATION OF THE BACK-UP COMPUTER SYSTEM (BUCS) FOR OPERATION	X	X			2	SSgt		3-IXF-24
DUTY AREA 08 - BACK-UP COMPUTER SYSTEM (BUCS) INITIALIZATION AND DATABASE										
1)	0848.08.01	SUPERVISE THE INITIALIZATION OF THE BACK-UP COMPUTER SYSTEM (BUCS) AND THE CONSTRUCTION OF A DATA BASE	X	X			2	SSgt		3-IXF-25

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0848.08.02	SUPERVISE THE LOADING AND UPDATE OF A PREVIOUSLY ENTERED DATA BASE IN THE BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-25
DUTY AREA 09 - BACK-UP COMPUTER SYSTEM (BUCS) FIRE MISSION PROCESSING										
1)	0848.09.01	SUPERVISE THE PROCESSING OF AN AREA FIRE MISSION USING BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-26
DUTY AREA 10 - BACK-UP COMPUTER SYSTEM (BUCS) REGISTRATIONS AND REGISTRATION CORRECTIONS										
1)	0848.10.01	SUPERVISE THE PROCESSING OF A PRECISION REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-26
2)	0848.10.02	SUPERVISE THE PROCESSING OF A HIGH BURST(HB)/MEAN-POINT-OF-IMPACT (MPI)/RADAR REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-27
3)	0848.10.03	VERIFY THE CONCURRENT METEOROLOGICAL (MET) PROCEDURE USING THE BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-27
4)	0848.10.04	VERIFY THE UPDATING OF REGISTRATION CORRECTIONS WITH SURVEY DATA USING THE BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-27
5)	0848.10.05	VERIFY THE COMPUTATION OF A BATTERY COMPUTER SYSTEM (BCS) TO BACK-UP COMPUTER SYSTEM (BUCS) RESIDUALS USING THE BUCS	X	X			2	SSgt		3-IXF-28
DUTY AREA 11 - BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL SITUATIONS										
1)	0848.11.01	SUPERVISE THE PROCESSING OF AN ILLUMINATION MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-28
2)	0848.11.02	SUPERVISE THE PROCESSING OF A SMOKE MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-29
DUTY AREA 12 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) SUPERVISOR										
1)	0848.12.01	DIRECT THE ESTABLISHMENT OF A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)		X			2	SSgt		3-IXF-29
2)	0848.12.02	DIRECT THE ESTABLISHMENT OF A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)		X			2	SSgt		3-IXF-30
3)	0848.12.03	DIRECT EXIT PROCEDURES		X			2	SSgt		3-IXF-30
4)	0848.12.04	PLAN A COMMUNICATIONS CONFIGURATION		X			2	SSgt		3-IXF-31
5)	0848.12.05	PLAN A DATA DISTRIBUTION SCHEME		X			2	SSgt		3-IXF-31
6)	0848.12.06	SUPERVISE THE ENTRY OF A PLANNED COMMUNICATIONS CONFIGURATION		X			2	SSgt		3-IXF-32
7)	0848.12.07	SUPERVISE THE IMPLEMENTATION OF A PLANNED COMMUNICATIONS CONFIGURATION		X			2	SSgt		3-IXF-32
8)	0848.12.08	SUPERVISE THE ENTRY OF THE DISTRIBUTION DATA		X			2	SSgt		3-IXF-33
9)	0848.12.09	SUPERVISE FIRE SUPPORT TACTICAL DATA SYSTEM (FSTDs) DATABASE INPUT		X			2	SSgt		3-IXF-33
10)	0848.12.10	ESTABLISH TARGET GUIDANCES		X			2	SSgt		3-IXF-34
11)	0848.12.11	ESTABLISH FIRE SUPPORT (FS) ATTACK GUIDANCES		X			2	SSgt		3-IXF-34
12)	0848.12.12	ESTABLISH UNIT AND SENSOR GUIDANCES		X			2	SSgt		3-IXF-35
13)	0848.12.13	ESTABLISH FIELD ARTILLERY (FA) ATTACK GUIDANCES		X			2	SSgt		3-IXF-35
14)	0848.12.14	ESTABLISH COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES		X			2	SSgt		3-IXF-35
15)	0848.12.15	ESTABLISH MISCELLANEOUS GUIDANCES		X			2	SSgt		3-IXF-36
16)	0848.12.16	DIRECT ESTABLISHMENT OF INTERVENTION POINT DATA		X			2	SSgt		3-IXF-36
17)	0848.12.17	SUPERVISE TARGET REPORT PROCESSING		X			2	SSgt		3-IXF-37

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
18)	0848.12.18	SUPERVISE FIRE REQUEST PROCESSING		X			2	SSgt		3-IXF-37
19)	0848.12.19	DEVELOP A SCHEDULE OF FIRES		X			2	SSgt		3-IXF-38
20)	0848.12.20	SUPERVISE THE IMPLEMENTATION OF A PLANNED SITUATION INTO CURRENT		X			2	SSgt		3-IXF-38
21)	0848.12.21	PLAN UNIT MOVEMENT		X			2	SSgt		3-IXF-39
22)	0848.12.22	PLAN CONTINUITY OF OPERATIONS (CONOPS)		X			2	SSgt		3-IXF-39
23)	0848.12.23	SUPERVISE CONTINUITY OF OPERATIONS (CONOPS) EXECUTION		X			2	SSgt		3-IXF-40
24)	0848.12.24	DIRECT THE CREATION OF A TRIGGER EVENT		X			2	SSgt		3-IXF-41
25)	0848.12.25	DIRECT ACTIONS FOR A TRIPPED TRIGGER EVENT		X			2	SSgt		3-IXF-41
DUTY AREA 13 - SURVEY										
1)	0848.13.01	VERIFY MEASURE DISTANCES WITH THE DISTOMAT DI-3000	X	X	X		2	SSgt		3-IXF-41
2)	0848.13.02	VERIFY DI-3000 DISTOMAT/THEODOLITE PARALLELISM TEST AND ADJUSTMENT	X	X	X		6	SSgt		3-IXF-42
3)	0848.13.03	SUPERVISE THE MEASURING OF A HORIZONTAL AND VERTICAL ANGLE WITH A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-42
4)	0848.13.04	SUPERVISE OBSERVATIONS FOR THE ARTY ASTRO METHOD	X	X	X		2	SSgt		3-IXF-43
5)	0848.13.05	SUPERVISE THEODOLITE TEST AND ADJUSTMENTS	X	X	X		6	SSgt		3-IXF-43
6)	0848.13.06	SUPERVISE THE MAINTENANCE ON A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-44
7)	0848.13.07	VERIFY THE RECORDED FIELD NOTES FOR A HORIZONTAL AND VERTICAL ANGLE	X	X	X		2	SSgt		3-IXF-44
8)	0848.13.08	VERIFY THE RECORDED FIELD NOTES FOR ASTRONOMIC OBSERVATIONS	X	X	X		2	SSgt		3-IXF-45
9)	0848.13.09	VERIFY THE RECORDED FIELD NOTES FOR THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-45
10)	0848.13.10	SUPERVISE THE COMPUTATIONS OF AZIMUTHS AND DISTANCES FROM COORDINATES	X	X	X		2	SSgt		3-IXF-46
11)	0848.13.11	VERIFY THE CONVERSION AND TRANSFORMATION OF COORDINATES AND AZIMUTH	X	X	X		2	SSgt		3-IXF-46
12)	0848.13.12	SUPERVISE THE COMPUTATIONS OF UNIVERSAL TRAVERSE MERCATOR (UTM) CONVERGENCE	X	X			2	SSgt		3-IXF-47
13)	0848.13.13	VERIFY TRIG TRAVERSE COMPUTATIONS	X	X	X		2	SSgt		3-IXF-47
14)	0848.13.14	VERIFY TRAVERSE COMPUTATIONS	X	X	X		2	SSgt		3-IXF-48
15)	0848.13.15	VERIFY COMPUTATIONS OF ASTRONOMIC OBSERVATIONS	X	X	X		2	SSgt		3-IXF-48
16)	0848.13.16	VERIFY INTERSECTION COMPUTATIONS	X	X	X		2	SSgt		3-IXF-49
17)	0848.13.17	VERIFY THREE POINT RESECTION COMPUTATIONS	X	X	X		2	SSgt		3-IXF-49
18)	0848.13.18	PERFORM DATUM TO DATUM TRANSFORMATION COMPUTATIONS	X	X	X		2	SSgt		3-IXF-50
19)	0848.13.19	SUPERVISE THE SELECTION AND IDENTIFICATION OF STARS FOR ASTRONOMIC OBSERVATION	X	X	X		2	SSgt		3-IXF-50
20)	0848.13.20	VERIFY THE INITIALIZATION OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-51
21)	0848.13.21	SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB OVER A SURVEY CONTROL POINT (SCP)	X	X	X		2	SSgt		3-IXF-52
22)	0848.13.22	SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE OVER A SURVEY CONTROL POINT (SCP) (AUTOREFLECTION)	X	X	X		2	SSgt		3-IXF-52
23)	0848.13.23	SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH PLUMB BOB OVER A STATION LOCATED BY GLOBAL POSITIONING SYSTEM (GPS)	X	X	X		2	SSgt		3-IXF-53

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
24)	0848.13.24	SUPERVISE THE PERFORMANCE OF A TWO POSITION MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB	X	X	X		2	SSgt		3-IXF-54
25)	0848.13.25	SUPERVISE THE PERFORMANCE OF A MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-54
26)	0848.13.26	SUPERVISE THE PERFORMANCE OF AN OPTICAL AZIMUTH MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-55
27)	0848.13.27	SUPERVISE THE EXTRACTION OF ADJUSTED DATA FROM THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-55
28)	0848.13.28	SUPERVISE THE PERFORMANCE OF OPERATOR MAINTENANCE ON THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-56
29)	0848.13.29	SUPERVISE THE CONVERSION TO COMMON CONTROL PROCEDURES	X	X	X		2	SSgt		3-IXF-56
30)	0848.13.30	SUPERVISE THE MARKING OF SURVEY STATIONS	X	X	X		2	SSgt		3-IXF-57
31)	0848.13.31	SUPERVISE THE DECLINATION OF AN M2A2 AIMING CIRCLE	X	X	X		2	SSgt		3-IXF-57
32)	0848.13.32	VERIFY THE DETERMINATION OF A GRID AZIMUTH WITH A DECLINATED M2A2 AIMING CIRCLE	X	X	X		2	SSgt		3-IXF-58
33)	0848.13.33	SUPERVISE THE PERFORMANCE OF CRATER ANALYSIS WITH AN M2A2 AIMING CIRCLE	X	X			6	SSgt		3-IXF-58
34)	0848.13.34	SUPERVISE THE PERFORMANCE OF SHELL FRAGMENT ANALYSIS	X	X	X		6	SSgt		3-IXF-59
35)	0848.13.35	SUPERVISE THE PERFORMANCE OF OPERATOR'S MAINTENANCE ON AN M2A2 AIMING CIRCLE	X		X		2	SSgt		3-IXF-60
36)	0848.13.36	SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION	X	X	X	X	2	SSgt		3-IXF-60
37)	0848.13.37	SUPERVISE THE CONDUCT OF AN IMMEDIATE SUPPRESSION MISSION	X	X	X	X	2	SSgt		3-IXF-61
38)	0848.13.38	SUPERVISE THE UPDATE OF THE EMPHEMERIS FILE IN GLOBAL POSITIONING SYSTEM (GPS) SURVEY	X	X	X		2	SSgt		3-IXF-61
39)	0848.13.39	SUPERVISE THE PRINTING OF GLOBAL POSITIONING SYSTEM (GPS) OBSERVATION WINDOWS USING PLANNING SOFTWARE	X	X	X		2	SSgt		3-IXF-62
40)	0848.13.40	SUPERVISE THE ESTABLISHMENT OF AN ABSOLUTE POINT	X	X	X		2	SSgt		3-IXF-62
41)	0848.13.41	SUPERVISE THE PERFORMANCE OF A REAL TIME KINEMATIC/ON THE FLY (RTK/OTF) SURVEY	X	X	X		2	SSgt		3-IXF-63
42)	0848.13.42	SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS WITH THE TDC2M	X	X	X		2	SSgt		3-IXF-63
43)	0848.13.43	SUPERVISE THE PERFORMANCE OF A FAST STATIC, STATIC, AND KINEMATIC SURVEY	X	X	X		2	SSgt		3-IXF-64
44)	0848.13.44	SUPERVISE THE POSTING OF PROCESS DATA FROM A FAST STATIC, STATIC, AND KINEMATIC NETWORK SURVEY	X	X	X		2	SSgt		3-IXF-64
45)	0848.13.45	SUPERVISE THE ADJUSTMENT OF A FAST STATIC, STATIC, AND KINEMATIC SURVEY NETWORK	X	X	X		2	SSgt		3-IXF-64
46)	0848.13.46	VERIFY THE DETERMINATION OF USER DEFINED DATA AND ELLIPSOID DATUM	X	X	X		2	SSgt		3-IXF-65
47)	0848.13.47	SUPERVISE RECONNAISSANCE FOR ARTILLERY UNITS	X	X	X	X	2	SSgt		3-IXF-65
DUTY AREA 14 - FIRING CHARTS										
1)	0848.14.01	PROVIDE REQUIRED DATA FOR THE CONSTRUCTION OF A SURVEYED FIRING CHART	X	X			2	SSgt		3-IXF-66
2)	0848.14.02	VERIFY THE CONSTRUCTION OF SURVEYED FIRING CHARTS AND THE DETERMINATION OF CHART DATA	X	X			2	SSgt		3-IXF-66
3)	0848.14.03	VERIFY THE CONSTRUCTION OF AN EMERGENCY FIRING CHART	X	X			2	SSgt		3-IXF-67

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
4)	0848.14.04	SUPERVISE THE PREPARATION OF AN OBSERVED FIRING CHART	X	X			2	SSgt		3-IXF-67
5)	0848.14.05	SUPERVISE THE TRANSFER OF DATA FROM A MAP SPOT OR OBSERVED FIRING CHART TO A SURVEYED FIRING CHART	X	X			2	SSgt		3-IXF-67
DUTY AREA 15 - MANUAL SITE										
1)	0848.15.01	VERIFY VERTICAL INTERVAL, ANGLE OF SITE, SITE, AND THE VERTICAL ANGLE	X	X			2	SSgt		3-IXF-68
DUTY AREA 16 - MANUAL FIRE MISSION PROCESSING										
1)	0848.16.01	DETERMINE THE AMOUNT AND TYPE OF MUNITIONS NEEDED TO ACHIEVE SUPPRESSION, NEUTRALIZATION, AND DESTRUCTION OF TARGETS	X	X			2	SSgt		3-IXF-68
2)	0848.16.02	DETERMINE AND ANNOUNCE THE BATTERY FIRE ORDER	X	X			2	SSgt		3-IXF-69
3)	0848.16.03	DETERMINE AND ANNOUNCE THE BATTALION FIRE ORDER	X	X			2	SSgt		3-IXF-69
4)	0848.16.04	VERIFY THE MESSAGE TO OBSERVER (MTO)	X	X			2	SSgt		3-IXF-69
5)	0848.16.05	SUPERVISE THE PROCESSING OF SIMULTANEOUS FIRE MISSIONS	X	X			2	SSgt		3-IXF-69
6)	0848.16.06	APPLY VALUES FROM TABULAR FIRING TABLES (TFTS) AND ADDENDUMS	X	X			2	SSgt		3-IXF-70
7)	0848.16.07	VERIFY FIRING DATA USING A GRAPHICAL FIRING TABLE (GFT) WITH OR WITHOUT A GFT SETTING APPLIED	X	X			2	SSgt		3-IXF-70
8)	0848.16.08	VERIFY BATTERY FIRE COMMANDS	X	X			2	SSgt		3-IXF-71
9)	0848.16.09	VERIFY THE PROCESSING OF A HIGH EXPLOSIVE (HE) FIRE MISSION (Q, TI, VT)	X	X			2	SSgt		3-IXF-71
10)	0848.16.10	VERIFY THE PROCESSING OF A FIRE MISSION USING A NONSTANDARD WEIGHT PROJECTILE	X	X			2	SSgt		3-IXF-71
11)	0848.16.11	CONSTRUCT A HIGH ANGLE GRAPHICAL FIRING TABLE (GFT) SETTING	X	X			2	SSgt		3-IXF-72
12)	0848.16.12	DETERMINE FIRING DATA FROM A HIGH ANGLE GRAPHICAL FIRING TABLE (GFT) SETTING	X	X			2	SSgt		3-IXF-72
13)	0848.16.13	VERIFY THE PROCESSING OF A HIGH EXPLOSIVE (HE) HIGH ANGLE FIRE MISSION (Q & VT)	X	X			2	SSgt		3-IXF-72
14)	0848.16.14	VERIFY THE PROCESSING OF AN ILLUMINATION (1 GUN, 2 GUN RANGE AND LATERAL SPREAD, AND COORDINATED ILLUMINATION) FIRE MISSION	X	X			2	SSgt		3-IXF-73
15)	0848.16.15	VERIFY THE PROCESSING OF AN IMMEDIATE SUPPRESSION/SMOKE FIRE MISSION	X	X			2	SSgt		3-IXF-74
16)	0848.16.16	VERIFY THE PROCESSING OF A SHELL DPICM FIRE MISSION	X	X			2	SSgt		3-IXF-73
DUTY AREA 17 - MANUAL REGISTRATIONS										
1)	0848.17.01	SUPERVISE THE PROCESSING OF A REGISTRATION AND THE APPLICATION OF A GRAPHICAL FIRING TABLE (GFT) SETTING AND TOTAL CORRECTIONS	X	X			2	SSgt		3-IXF-74
2)	0848.17.02	VERIFY THE TRANSFER AND/OR UPDATE OF A GRAPHICAL FIRING TABLE (GFT) SETTING	X	X			2	SSgt		3-IXF-74
DUTY AREA 18 - METEOROLOGICAL VALIDATION										
1)	0848.18.01	VERIFY THE METEOROLOGICAL (MET) MESSAGE	X	X			2	SSgt		3-IXF-75
DUTY AREA 19 - MUZZLE VELOCITY										
1)	0848.19.01	VERIFY THE M94 VELOCIMETER DATA	X	X			2	SSgt		3-IXF-75

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0848.19.02	RECORD THE HISTORICAL MUZZLE VELOCITY (FIRST LOT CALIBRATION) AND INFER A SECOND LOT CALIBRATION USING THE MUZZLE VELOCITY RECORD (DA FORM 4982-R)	X	X			2	SSgt		3-IXF-75
3)	0848.19.03	DETERMINE MUZZLE VELOCITY VARIANCES (MVVS) BASED ON SHOOTING STRENGTH AND PROPELLANT EFFICIENCIES	X	X			2	SSgt		3-IXF-76
DUTY AREA 20 - MANUAL SPECIAL SITUATIONS										
1)	0848.20.01	SUPERVISE THE PROCESSING OF A QUICK SMOKE MISSION	X	X			2	SSgt		3-IXF-76
2)	0848.20.02	SUPERVISE THE PROCESSING OF A SHELL ROCKET ASSISTED PROJECTILE (RAP) FIRE MISSION	X	X			2	SSgt		3-IXF-76
3)	0848.20.03	SUPERVISE THE PROCESSING OF A COPPERHEAD FIRE MISSION	X	X			2	SSgt		3-IXF-77
4)	0848.20.04	SUPERVISE THE PROCESSING OF A SWEEP AND ZONE FIRE MISSION	X	X			3	SSgt		3-IXF-77
5)	0848.20.05	ASSIST AN UNTRAINED OBSERVER WITH THE CONDUCT OF A FIRE MISSION					2	SSgt		3-IXF-77
6)	0848.20.06	VERIFY REPLOT TARGETS AND REPLOT DATA (FZ QUICK AND VT)	X	X			2	SSgt		3-IXF-78
7)	0848.20.07	PROCESS A FIRE MISSION INTO A SECONDARY ZONE (ZONE TO ZONE TRANSFORMATION)	X	X			2	SSgt		3-IXF-78
DUTY AREA 21 - MANUAL SAFETY										
1)	0848.21.01	COMPUTE BASIC MANUAL SAFETY DATA FOR LOW AND HIGH ANGLE FIRE	X	X			2	SSgt		3-IXF-78
2)	0848.21.02	COMPUTE EXECUTIVE OFFICER'S/POSITION MINIMUM QUADRANT ELEVATION (QE)	X	X			2	SSgt		3-IXF-79
3)	0848.21.03	UPDATE MANUAL SAFETY (LOW & HIGH ANGLE)	X	X			2	SSgt		3-IXF-80
DUTY AREA 22 - CONVERSION FROM AUTOMATED TO MANUAL GUNNERY PROCEDURES										
1)	0848.22.01	ESTABLISH A MANUAL BACK-UP FOR AUTOMATED OPERATIONS					2	SSgt		3-IXF-80
2)	0848.22.02	CONVERT AN AUTOMATED MISSION IN PROGRESS TO MANUAL PROCEDURES					2	SSgt		3-IXF-81
DUTY AREA 23 - ALTERNATE MANUAL TECHNIQUES										
1)	0848.23.01	DETERMINE FIRING DATA USING EMERGENCY OBSERVER PROCEDURES (BLACK MAGIC)					2	SSgt		3-IXF-81
2)	0848.23.02	DETERMINE RANGE K AND FUZE K	X	X			2	SSgt		3-IXF-81
DUTY AREA 24 - PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)										
1)	0848.24.01	SUPERVISE THE PERFORMANCE OF THE SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-82
2)	0848.24.02	SUPERVISE CHANGING THE MEMORY BATTERY FOR THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-82
3)	0848.24.03	SUPERVISE THE PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE FOR THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-83
4)	0848.24.04	SUPERVISE VERIFICATION OF ERRORS CAUSING AN/PSN-11 (PLGR) WARNING DISPLAYS	X	X		X	2	SSgt		3-IXF-83
5)	0848.24.05	SUPERVISE THE PERFORMANCE OF NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-84
6)	0848.24.06	VERIFY THE DETERMINATION OF A POSITION IN THE AVERAGING MODE WITH THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-85
7)	0848.24.07	SUPERVISE THE ENTRY OF A USER DEFINED DATUM IN THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-85
8)	0848.24.08	SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS WITH THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-86

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
9)	0848.24.09	SUPERVISE THE PERFORMANCE OF PLGR TO PLGR OPERATIONS	X	X		X	2	SSgt		3-IXF-86
10)	0848.24.10	VERIFY THE LOADING OF CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT WITH THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-87
DUTY AREA 25 - FAMILY OF SCATTERABLE MINES (FASCAM) PROCEDURES										
1)	0848.25.01	DETERMINE AIMPOINT LOCATION AND FIRING DATA FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING THE BATTERY COMPUTER SYSTEM (BCS)	X	X			2	SSgt		3-IXF-87
2)	0848.25.02	DETERMINE AIMPOINT LOCATION AND FIRING DATA FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING THE BACKUP COMPUTER SYSTEM (BUCS)	X	X			2	SSgt		3-IXF-88
3)	0848.25.03	DETERMINE AIMPOINT LOCATION AND FIRING DATA FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING MANUAL PROCEDURES	X	X			2	SSgt		3-IXF-88
DUTY AREA 26 - MANUAL FIRE PLANNING										
1)	0848.26.01	SUPERVISE THE MAINTENANCE OF A TACTICAL SITUATION MAP					2	SSgt		3-IXF-89
2)	0848.26.02	SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS					2	SSgt		3-IXF-89
3)	0848.26.03	SUPERVISE THE PROCESSING OF A FIRE PLAN					2	SSgt		3-IXF-89
DUTY AREA 27 - EMPLOYMENT OF RADAR SET AN/TPQ-46										
1)	0848.27.01	RECOMMEND PLANS, ORGANIZATION, AND EMPLOYMENT OF RADAR SET AN/TPQ-46	X	X			3	SSgt		3-IXF-90
2)	0848.27.02	SELECT A SITE FOR THE RADAR SET AN/TPQ-46	X	X			3	SSgt		3-IXF-90
3)	0848.27.03	SUPERVISE THE PREPARATION OF THE RADAR SET AN/TPQ-46 FOR MOVEMENT	X	X			3	SSgt		3-IXF-91
4)	0848.27.04	SUPERVISE THE PREPARATION OF THE RADAR SET AN/TPQ-46 FOR OPERATION	X	X			3	SSgt		3-IXF-92
DUTY AREA 28 - OPERATIONS OF RADAR SET AN/TPQ-46										
1)	0848.28.01	SUPERVISE THE OPERATION OF THE RADAR SET AN/TPQ-46	X	X			3	SSgt		3-IXF-93
2)	0848.28.02	SUPERVISE VOICE AND DIGITAL COMMUNICATIONS	X	X	X		3	SSgt		3-IXF-94
3)	0848.28.03	SUPERVISE OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON RADAR SET AN/TPQ-46	X	X	X		3	SSgt		3-IXF-95
DUTY AREA 29 - TARGET PROCESSING										
1)	0848.29.01	SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS			X		3	SSgt		3-IXF-96
2)	0848.29.02	SUPERVISE MAINTENANCE OF THE TARGET PRODUCTION MAP			X		3	SSgt		3-IXF-97
3)	0848.29.03	SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS			X		3	SSgt		3-IXF-97
DUTY AREA 30 - METEOROLOGICAL										
1)	0848.30.01	SUPERVISE ACQUIRING AND RECORDING GROUND METEOROLOGICAL (MET) DATA	X	X			3	SSgt		3-IXF-98
2)	0848.30.02	SUPERVISE SET UP AND OPERATION OF THE ML-474/GM MMS THEODOLITES	X	X			3	SSgt		3-IXF-99
3)	0848.30.03	SUPERVISE THE ENCODING AND RECORDING OF METEOROLOGICAL MESSAGES	X	X			3	SSgt		3-IXF-99

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
4)	0848.30.04	SUPERVISE MAINTENANCE OF METEOROLOGICAL EQUIPMENT	X	X	X		3	SSgt		3-IXF-100
5)	0848.30.05	IDENTIFY SIGNIFICANT WEATHER CHANGES	X	X			3	SSgt		3-IXF-100
6)	0848.30.06	SUPERVISE THE LOADING, MOVEMENT, EMPLACEMENT, AND DESTRUCTION OF A METEOROLOGICAL SECTION	X	X	X		3	SSgt		3-IXF-101
7)	0848.30.07	SUPERVISE THE EMPLACEMENT OF THE METEOROLOGICAL MEASURING SET (MMS) AND ASSOCIATED EQUIPMENT	X	X			3	SSgt		3-IXF-101
8)	0848.30.08	SUPERVISE THE POWER UP/DOWN OF THE METEOROLOGICAL MEASURING SET (MMS)	X	X			3	SSgt		3-IXF-102
9)	0848.30.09	SUPERVISE THE PERFORMANCE OF SYSTEM GENERATION (SYSGEN)	X	X			3	SSgt		3-IXF-102
10)	0848.30.10	SUPERVISE THE SELECTION OF AN OPERATING MODE AND VERIFICATION OF SYSTEM SYNCHRONIZATION	X	X			3	SSgt		3-IXF-103
11)	0848.30.11	SUPERVISE THE PERFORMANCE OF RADIOSONDE COEFFICIENT ENTRY AND GROUND CHECK	X	X			3	SSgt		3-IXF-103
12)	0848.30.12	SUPERVISE THE PREPARATION OF RADIOSONDE FOR LAUNCH AND INPUT OF SURFACE OBSERVATION DATA	X	X			3	SSgt		3-IXF-103
13)	0848.30.13	SUPERVISE THE ESTABLISHMENT OF COMMUNICATIONS	X	X			3	SSgt		3-IXF-104
14)	0848.30.14	SUPERVISE METEOROLOGICAL MEASURING SET (MMS) FLIGHT OPERATIONS	X	X			3	SSgt		3-IXF-104
15)	0848.30.15	PLAN AND IMPLEMENT A METEOROLOGICAL (MET) SECTION'S FLIGHT SCHEDULE	X	X			3	SSgt		3-IXF-105
16)	0848.30.16	PLAN AND MANAGE THE METEOROLOGICAL (MET) SECTION'S EXPENDABLE INVENTORY	X	X			3	SSgt		3-IXF-105
DUTY AREA 31 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) INITIALIZATION										
1)	0848.31.01	VERIFY INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) SETUP CONFIGURATION	X	X			2	SSgt		3-IXF-106
2)	0848.31.02	VERIFY INITIALIZATION DATA WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-106
3)	0848.31.03	VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES IN THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-107
DUTY AREA 32 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL DATABASE CONSTRUCTION										
1)	0848.32.01	VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-107
2)	0848.32.02	VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-108
3)	0848.32.03	VERIFY THE INPUT OF METEOROLOGICAL (MET) DATA IN THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-108
DUTY AREA 33 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL FIRE CONTROL										
1)	0848.33.01	VERIFY THE INPUT OF COMMANDER'S CRITERIA INFORMATION IN THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-109
2)	0848.33.02	SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-110
3)	0848.33.03	SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt		3-IXF-110

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 34 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) ARTILLERY TARGET INTELLIGENCE										
1)	0848.34.01	SUPERVISE THE INPUT AND RETRIEVAL OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt	3-IXF-111	
2)	0848.34.02	VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt	3-IXF-112	
DUTY AREA 35 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) NONNUCLEAR FIRE PLANNING										
1)	0848.35.01	DIRECT THE COMPUTATION OF A NONNUCLEAR FIRE PLAN WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt	3-IXF-113	
2)	0848.35.02	DIRECT THE COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt	3-IXF-113	
DUTY AREA 36 - MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) TECHNIQUES AND OPERATIONS										
1)	0848.36.01	DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE USE OF THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)					2	SSgt	3-IXF-114	
2)	0848.36.02	SUPERVISE A CHANGE IN FIELD ARTILLERY MISSION (GS/GSR/R) TO A DIRECT SUPPORT (DS) MISSION WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)	X	X			2	SSgt	3-IXF-114	
3)	0848.36.03	COORDINATE THE MANAGEMENT OF AN INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) EQUIPPED FIRE DIRECTION CENTER (FDC)	X	X			3	SSgt	3-IXF-115	
4)	0848.36.04	PREPARE UNIT MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) SUSTAINMENT TRAINING PLAN	X	X			3	SSgt	3-IXF-115	
DUTY AREA 37 - 81 MM MORTAR PLATOON OPERATIONS										
1)	0848.37.01	SET UP THE M16 PLOTTING BOARD FOR WEAPONS EQUIPPED WITH THE M64-SERIES SIGHT	X	X	X		2	SSgt	3-IXF-116	
2)	0848.37.02	DETERMINE TERRAIN GUN POSITION CORRECTIONS			X		2	SSgt	3-IXF-116	
3)	0848.37.03	DETERMINE SPECIAL CORRECTIONS			X		2	SSgt	3-IXF-117	
4)	0848.37.04	DETERMINE HASTY SPECIAL CORRECTIONS			X		2	SSgt	3-IXF-118	
5)	0848.37.05	DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF OFFENSIVE OPERATIONS			X		2	SSgt	3-IXF-118	
6)	0848.37.06	DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF DEFENSIVE OPERATIONS			X		2	SSgt	3-IXF-119	
7)	0848.37.07	SELECT A MORTAR POSITION			X		2	SSgt	3-IXF-119	
8)	0848.37.08	LAY MORTAR SECTION/PLATOON PARALLEL				X	2	SSgt	3-IXF-120	
9)	0848.37.09	DIRECT FIRE DIRECTION CENTER (FDC) OPERATIONS			X		2	SSgt	3-IXF-120	
10)	0848.37.10	DIRECT A MORTAR SECTION/PLATOON DISPLACEMENT			X		2	SSgt	3-IXF-122	
MOS 0861, FIRE SUPPORT MAN										
DUTY AREA 01 - MAP READING AND M2 COMPASS										
1)	0861.01.01	DECLINATE AN M2 COMPASS USING THE FIELD EXPEDIENT METHOD	X	X	X		2	Pvt	3-XF-1	
2)	0861.01.02	ORIENT A MAP USING A DECLINATED M2 COMPASS	X	X	X		2	Pvt	3-XF-1	
3)	0861.01.03	LOCATE YOUR POSITION DURING A TERRAIN WALK	X	X	X		2	Pvt	3-XF-1	

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
4)	0861.01.04	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X		2	Pvt		3-XF-2
5)	0861.01.05	LOCATE POSITIONS IN A MOBILE ENVIRONMENT	X	X	X		2	Pvt		3-XF-2
6)	0861.01.06	DETERMINE LOCATION WITH THE AN/GVS-5 LASER RANGE FINDER	X	X			2	Pvt		3-XF-3
7)	0861.01.07	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO KNOWN POINTS	X	X			2	Pvt		3-XF-3
8)	0861.01.08	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST					2	Pvt		3-XF-4
9)	0861.01.09	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS					2	Pvt		3-XF-4
10)	0861.01.10	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING SELF-LOCATION PROCEDURE	X	X			2	Pvt		3-XF-5
11)	0861.01.11	LOCATE POSITION ON A MAP OR GROUND BY RESECTION	X	X	X		2	Pvt		3-XF-6
12)	0861.01.12	DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP	X	X	X		2	Pvt		3-XF-6
13)	0861.01.13	DETERMINE A POSITION WITH THE AN/PSN-11 PLGR IN THE AVERAGING MODE	X	X		X	2	Pvt		3-XF-7
14)	0861.01.14	PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 PLGR	X	X		X	2	Pvt		3-XF-8
15)	0861.01.15	CONDUCT BATTLEFIELD REPORTING			X	X	2	Pvt		3-XF-8
DUTY AREA 02 - COMMUNICATIONS										
1)	0861.02.01	ESTABLISH/ENTER AND LEAVE A RADIO TELEPHONE NET	X	X	X		2	Pvt		3-XF-9
2)	0861.02.02	ENCODE/DECODE/AUTHENTICATE USING THE NUMERAL CIPHER/AUTHENTICATION SYSTEM			X		2	Pvt		3-XF-10
3)	0861.02.04	SEND AND RECEIVE RADIO TRANSMISSIONS USING PROPER RADIO TELEPHONE PROCEDURES	X	X	X		2	Pvt		3-XF-10
4)	0861.02.05	TRANSMIT A MESSAGE UTILIZING NATO FORMAT					2	Pvt		3-XF-11
5)	0861.02.06	DRAFT A MESSAGE USING NATO FORMAT					2	Pvt		3-XF-12
6)	0861.02.07	OPERATE AN FM RADIO SET AN/PRC-119	X	X	X		2	Pvt		3-XF-12
7)	0861.02.08	INSTALL AN/VRC-88 RADIO SET			X		2	Pvt		3-XF-12
8)	0861.02.09	OPERATE A AN/VRC-88 RADIO SET			X		2	Pvt		3-XF-13
9)	0861.02.10	INSTALL AN/MRC-145 RADIO SET			X		2	Pvt		3-XF-13
10)	0861.02.11	OPERATE AN AN/MRC-145 RADIO SET			X		2	Pvt		3-XF-14
11)	0861.02.15	OPERATE AN AN/PRC-104 RADIO SET	X	X	X		2	Pvt		3-XF-14
12)	0861.02.16	INSTALL AN/MRC-138 RADIO SET			X		2	Pvt		3-XF-15
13)	0861.02.17	OPERATE AN AN/MRC-138 RADIO SET			X		2	Pvt		3-XF-16
14)	0861.02.18	PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET			X		2	Pvt		3-XF-16
15)	0861.02.19	ERECT OE-254 ANTENNA	X	X	X		2	Pvt		3-XF-17
16)	0861.02.20	INSTALL AND OPERATE RADIO SET CONTROL GROUP AN/GRA-39 AND/OR AN/PRC-119C FOR REMOTE OPERATION	X	X	X		2	Pvt		3-XF-18
17)	0861.02.21	OPERATE AND MAINTAIN A FIELD PHONE			X		2	Pvt		3-XF-19
18)	0861.02.22	EMPLOY THE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)					2	Pvt		3-XF-20
19)	0861.02.23	MAINTAIN COMMUNICATIONS EQUIPMENT	X	X	X		2	Pvt		3-XF-21
20)	0861.02.24	IDENTIFY ELECTRONIC COUNTERMEASURES (ECM) AND IMPLEMENT ELECTRONIC COUNTER-COUNTERMEASURES (ECCM)			X		2	Pvt		3-XF-21
21)	0861.02.25	PREPARE/SUBMIT OPERATOR'S MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI) REPORT			X		2	Pvt		3-XF-22
DUTY AREA 03 - OBSERVED FIRE PROCEDURES										
1)	0861.03.01	SELECT AN OBSERVATION POST AND PREPARE TO USE IT	X	X	X		2	Pvt		3-XF-23

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0861.03.02	PREPARE AN OBSERVATION POST FOR USE WHILE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) EQUIPPED	X	X			2	Pvt		3-XF-23
3)	0861.03.03	PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	X	X	X		2	Pvt		3-XF-24
4)	0861.03.04	DETERMINE DIRECTION TO TWO TARGETS	X	X	X		2	Pvt		3-XF-24
5)	0861.03.05	CONSTRUCT A TERRAIN SKETCH	X	X	X		2	Pvt		3-XF-25
6)	0861.03.06	PREPARE A VISIBILITY DIAGRAM			X		2	Pvt		3-XF-25
7)	0861.03.07	LOCATE A TARGET BY GRID COORDINATES	X	X	X		2	Pvt		3-XF-26
8)	0861.03.08	LOCATE A TARGET BY POLAR PLOT	X	X	X		2	Pvt		3-XF-26
9)	0861.03.09	LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	X	X	X		2	Pvt		3-XF-27
10)	0861.03.10	MEASURE ANGULAR DEVIATION WITH YOUR HAND	X	X	X		2	Pvt		3-XF-28
11)	0861.03.11	CONDUCT AN ADJUST FIRE MISSION	X	X	X	X	2	Pvt		3-XF-28
12)	0861.03.12	OPERATE THE AN/GVS-5 LASER RANGE FINDER	X	X			2	Pvt		3-XF-29
13)	0861.03.13	REQUEST AND ADJUST FIRE WITH THE AN/GVS-5 LASER RANGE FINDER	X	X			2	Pvt		3-XF-29
14)	0861.03.14	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON AN/GVS-5 LASER RANGE FINDER	X	X	X		2	Pvt		3-XF-30
15)	0861.03.15	PREPARE THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) FOR OPERATION	X	X			2	Pvt		3-XF-31
16)	0861.03.16	CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	X	X			2	Pvt		3-XF-31
17)	0861.03.17	CONDUCT A SUPPRESSION MISSION ON A PLANNED TARGET		X	X	X	2	Pvt		3-XF-32
18)	0861.03.18	CONDUCT AN IMMEDIATE SUPPRESSION MISSION	X	X	X		2	Pvt		3-XF-33
19)	0861.03.19	CONDUCT A FIRE FOR EFFECT (FFE) MISSION	X	X	X		2	Pvt		3-XF-34
20)	0861.03.20	CONDUCT AN ILLUMINATION MISSION	X	X	X		2	Pvt		3-XF-34
21)	0861.03.21	CONDUCT A COORDINATED ILLUMINATION MISSION	X	X	X		2	Pvt		3-XF-35
22)	0861.03.22	CONDUCT A FASCAM MISSION			X		2	Pvt		3-XF-36
23)	0861.03.23	CONDUCT A DPICM MISSION			X		2	Pvt		3-XF-36
24)	0861.03.24	CONDUCT A DANGER CLOSE FIRE MISSION	X	X	X		2	Pvt		3-XF-37
25)	0861.03.26	CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY					2	Pvt		3-XF-38
26)	0861.03.27	ADJUST FINAL PROTECTIVE FIRES			X		2	Pvt		3-XF-38
27)	0861.03.28	CONDUCT AN IMMEDIATE SMOKE MISSION	X	X	X		2	Pvt		3-XF-39
28)	0861.03.29	CONDUCT A QUICK SMOKE MISSION	X	X	X		2	Pvt		3-XF-40
29)	0861.03.30	CONDUCT A DESTRUCTION MISSION					2	Pvt		3-XF-41
30)	0861.03.31	CONDUCT A MISSION ON A MOVING TARGET	X	X			2	Pvt		3-XF-42
31)	0861.03.32	SELECT AND LOCATE REGISTRATION POINTS	X	X			2	Pvt		3-XF-43
32)	0861.03.33	CONDUCT A PRECISION REGISTRATION, QUICK AND TIME	X	X	X		2	Pvt		3-XF-43
33)	0861.03.34	CONDUCT A HIGH-BURST OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION	X	X	X		2	Pvt		3-XF-44
34)	0861.03.35	CONDUCT AN ABBREVIATED REGISTRATION	X	X	X		2	Pvt		3-XF-45
35)	0861.03.36	CONDUCT A MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)					2	Pvt		3-XF-45
36)	0861.03.37	CONDUCT EMERGENCY OBSERVER PROCEDURES					2	Pvt		3-XF-46
37)	0861.03.38	CONDUCT A MORTAR PRECISION REGISTRATION					2	Pvt		3-XF-47
38)	0861.03.40	CONDUCT FIRE MISSION ON IRREGULARLY SHAPED TARGETS					2	Pvt		3-XF-47
39)	0861.03.41	CONDUCT A COPPERHEAD MISSION					2	Pvt		3-XF-48
40)	0861.03.42	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE			X	X	2	Pvt		3-XF-49
41)	0861.03.43	CONDUCT AN ARTILLERY SUPPRESSION OF ENEMY AIR DEFENSE (SEAD)	X	X		X	2	Pvt		3-XF-50
42)	0861.03.44	CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION	X	X	X	X	2	Pvt		3-XF-51
43)	0861.03.45	CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) MISSION	X	X		X	2	Pvt		3-XF-51
44)	0861.03.46	CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-52
45)	0861.03.47	CONDUCT A DANGER CLOSE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-53
46)	0861.03.48	REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-53

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
47)	0861.03.49	CONDUCT AN ILLUMINATION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-54
48)	0861.03.50	CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-55
49)	0861.03.51	CONDUCT SIMULTANEOUS MISSIONS WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-55
50)	0861.03.52	CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-56
51)	0861.03.53	CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION	X	X	X	X	2	Pvt		3-XF-56
DUTY AREA 04 - FIRE SUPPORT PLANNING AND COORDINATION										
1)	0861.04.01	MAINTAIN INFORMATION ON FIRE SUPPORT STATUS CHART					2	Cpl		3-XF-57
2)	0861.04.02	POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)					2	Cpl		3-XF-58
3)	0861.04.03	PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)					2	Cpl		3-XF-58
4)	0861.04.04	PREPARE/SUBMIT A LIST OF TARGETS					2	Pvt		3-XF-59
5)	0861.04.05	CONSOLIDATE/PROCESS FORWARD OBSERVER'S (FO) LISTS OF TARGETS					2	Cpl		3-XF-59
6)	0861.04.06	PREPARE A TARGET BULLETIN (TARBUL)					2	Cpl		3-XF-60
7)	0861.04.07	ADVISE THE SUPPORTED UNIT OF FRIENDLY AND ENEMY FIRE SUPPORT CAPABILITIES AND LIMITATIONS		X	X		2	Sgt		3-XF-60
8)	0861.04.08	PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST		X		X	2	Sgt		3-XF-61
9)	0861.04.09	DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN					2	Sgt		3-XF-61
10)	0861.04.10	LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM			X		2	Cpl		3-XF-62
11)	0861.04.12	EVALUATE TARGETING INFORMATION			X		2	Cpl		3-XF-62
12)	0861.04.13	INFORM FIELD ARTILLERY HEADQUARTERS AND FIRE SUPPORT COORDINATION CENTERS (FSCCS) OF THE SUPPORTED UNIT'S SCHEME OF MANEUVER AND FIRE SUPPORT PLAN		X			2	Sgt		3-XF-63
13)	0861.04.14	INFORM SUPPORTED MANEUVER COMMANDER OF THE FIELD ARTILLERY'S TACTICAL MISSIONS AND CORRESPONDING ARTILLERY FIRE PLAN TO SUPPORT THE SCHEME OF MANEUVER		X			2	Sgt		3-XF-64
14)	0861.04.15	COORDINATE FIRES ACROSS BOUNDARIES		X			2	Sgt		3-XF-64
15)	0861.04.16	ANALYZE TARGETS TO DETERMINE PRECEDENCE AND TYPES AND QUANTITIES OF FIRE TO BE USED FOR ENGAGING TARGETS		X			2	Sgt		3-XF-65
16)	0861.04.17	PASS FIRE SUPPORT INFORMATION TO LOWER, ADJACENT, AND HIGHER FIELD ARTILLERY ELEMENTS		X			2	Sgt		3-XF-65
17)	0861.04.18	MONITOR/COORDINATE REQUESTS FOR NAVAL SURFACE FIRE SUPPORT (NSFS)		X			2	Sgt		3-XF-66
18)	0861.04.19	COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION		X		X	2	Sgt		3-XF-66
19)	0861.04.20	COORDINATE A REQUEST FOR IMMEDIATE CLOSE AIR SUPPORT (CAS)		X		X	2	Sgt		3-XF-67
20)	0861.04.21	ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)		X			2	Sgt		3-XF-68
21)	0861.04.22	PLAN/COORDINATE FIRE SUPPORT TO SUPPRESS ENEMY AIR DEFENSE		X		X	2	Sgt		3-XF-68
22)	0861.04.23	ADVISE THE MANEUVER COMMANDER ON EMPLOYMENT OF AVAILABLE TARGET ACQUISITION ASSETS, THEIR CAPABILITIES, AND LIMITATIONS		X	X		2	Sgt		3-XF-69
23)	0861.04.24	COORDINATE/PREPARE THE FIRE SUPPORT PORTION OF ANNEX C (OPERATIONS) AND THE FIRE SUPPORT APPENDIX (APPENDIX 12) OF THE MANEUVER OPERATION ORDER (OPORD)		X			2	Sgt		3-XF-69

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
24)	0861.04.25	PLAN FIRE SUPPORT FOR OFFENSIVE OPERATIONS		X	X		2	Sgt		3-XF-70
25)	0861.04.26	PLAN FIRE SUPPORT FOR DEFENSIVE OPERATIONS		X	X		2	Sgt		3-XF-71
26)	0861.04.27	INTEGRATE COMPANY ORGANIC INDIRECT FIRE WEAPONS INTO FIRE PLANS			X		2	LCpl		3-XF-72
27)	0861.04.28	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE GENERAL MISSION AND CHARACTERISTICS OF NAVAL GUNFIRE (NGF) EMPLOYED IN AN AMPHIBIOUS OPERATION		X			6	Sgt		3-XF-73
28)	0861.04.29	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE CAPABILITIES AND LIMITATIONS OF NAVAL GUNFIRE (NGF) SUPPORT FOR AN AMPHIBIOUS OPERATION		X			6	Sgt		3-XF-74
DUTY AREA 05 - COUNTERFIRE										
1)	0861.05.01	PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS			X		6	Pvt		3-XF-74
2)	0861.05.02	PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE DELAY CRATERS			X		6	Pvt		3-XF-75
3)	0861.05.03	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS			X		6	Pvt		3-XF-76
4)	0861.05.04	PERFORM SHELL FRAGMENT ANALYSIS			X		6	Pvt		3-XF-76
5)	0861.05.05	PREPARE/SUBMIT STANDARD SHELLING, MORTARING, AND BOMBING REPORT			X	X	6	Pvt		3-XF-77
DUTY AREA 07 - OBSERVER DIGITAL TERMINAL (ODT)										
1)	0861.07.01	PREPARE THE OBSERVER DIGITAL TERMINAL (ODT) FOR OPERATION	X	X			2	Pvt		3-XF-77
2)	0861.07.02	ESTABLISH COMMUNICATIONS PARAMETERS WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X			2	Pvt		3-XF-78
3)	0861.07.03	DETERMINE OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X			2	Pvt		3-XF-79
4)	0861.07.04	REPORT OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X			2	Pvt		3-XF-79
5)	0861.07.05	PROCESS AN AREA FIRE MISSION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X			2	Pvt		3-XF-80
6)	0861.07.06	PROCESS SPECIAL FIRE MISSIONS WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X			2	Pvt		3-XF-80
7)	0861.07.07	CONDUCT A PRECISION REGISTRATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X			2	Pvt		3-XF-81
8)	0861.07.08	CONDUCT A HIGH-BURST (HB) OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	X	X			2	Pvt		3-XF-82
9)	0861.07.09	REPORT ENEMY ACTIVITY BY THE USE OF THE ARTILLERY TARGET INTELLIGENCE (ATI) MESSAGES WITH THE OBSERVER DIGITAL TERMINAL (ODT)			X		2	Pvt		3-XF-82
10)	0861.07.10	TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE OBSERVER DIGITAL TERMINAL (ODT)					2	Pvt		3-XF-83
11)	0861.07.11	REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE OBSERVER DIGITAL TERMINAL (ODT)			X		2	Pvt		3-XF-83
12)	0861.07.12	INPUT A TARGET IN THE KNOWN POINT FILE WITH THE OBSERVER DIGITAL TERMINAL (ODT)					2	Pvt		3-XF-83
13)	0861.07.13	VERIFY OBSERVER DIGITAL TERMINAL (ODT) INITIALIZATION					2	LCpl		3-XF-84
14)	0861.07.14	VERIFY OBSERVER DIGITAL TERMINAL (ODT) INPUT MESSAGES					2	Sgt		3-XF-84

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
15)	0861.07.15	SUPERVISE THE PROCESSING OF A FIRE REQUEST FROM AN OBSERVER DIGITAL TERMINAL (ODT) EQUIPPED BATTALION FIRE SUPPORT COORDINATION CENTER (FSCC)					2	Sgt		3-XF-84
DUTY AREA 08 - LIGHTWEIGHT COMPUTER UNIT (LCU) OPERATIONS										
1)	0861.08.01	PREPARE THE LIGHTWEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STCP) FOR OPERATIONS					2	LCpl		3-XF-85
2)	0861.08.02	PREPARE LIGHTWEIGHT COMPUTER UNIT (LCU) DUAL TERMINAL COMMAND POST (DTCP) FOR OPERATIONS					2	LCpl		3-XF-86
3)	0861.08.03	ESTABLISH COMMUNICATION PARAMETERS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-86
4)	0861.08.04	VERIFY LIGHTWEIGHT COMPUTER UNIT (LCU) SETUP CONFIGURATIONS					2	LCpl		3-XF-87
5)	0861.08.05	VERIFY INITIALIZATION DATA WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-87
6)	0861.08.06	VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-88
7)	0861.08.07	INPUT DATA INTO THE SUPPORT PROGRAM OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-88
8)	0861.08.08	INPUT DATA INTO THE AMMUNITION AND FIRE UNIT INFORMATION FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-89
9)	0861.08.09	INPUT COMMANDER'S CRITERIA INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-90
10)	0861.08.10	PROCESS A FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-90
11)	0861.08.11	PROCESS A SPECIAL FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-91
12)	0861.08.12	INPUT AND RETRIEVE TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-92
13)	0861.08.13	MODIFY THE ATI MODE 3 MODIFICATION FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-93
14)	0861.08.14	COMPUTE A NONNUCLEAR FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-94
15)	0861.08.15	COMPUTE A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-94
DUTY AREA 09 - LIGHTWEIGHT COMPUTER UNIT (LCU) SUPERVISION										
1)	0861.09.01	VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	Sgt		3-XF-95
2)	0861.09.02	VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	Sgt		3-XF-96
3)	0861.09.03	VERIFY THE INPUT OF COMMANDER'S CRITERIA INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-96
4)	0861.09.04	SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-97
5)	0861.09.05	SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-97
6)	0861.09.06	SUPERVISE THE INPUT AND RETRIEVAL OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-99
7)	0861.09.07	VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-99

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
8)	0861.09.08	DIRECT THE BUILDING AND COMPUTATION OF A NONNUCLEAR FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)						3	Sgt	3-XF-100
9)	0861.09.09	DIRECT THE BUILDING AND COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)						3	Sgt	3-XF-101
10)	0861.09.10	DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)						3	Sgt	3-XF-101
11)	0861.09.11	DIRECT THE PREPARATION AND MAINTENANCE OF THE MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) FILE MANAGEMENT SYSTEM WITHIN THE FIRE SUPPORT COORDINATION CENTER (FSCC) WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)						3	Sgt	3-XF-102

DUTY AREA 10 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) OPERATIONS

1)	0861.10.01	ESTABLISH A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)		X				2	Pvt	3-XF-102
2)	0861.10.02	ESTABLISH A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)		X				2	Pvt	3-XF-103
3)	0861.10.03	PERFORM EXIT PROCEDURES		X				2	Pvt	3-XF-104
4)	0861.10.04	ENTER A PLANNED COMMUNICATIONS CONFIGURATION		X				2	Pvt	3-XF-104
5)	0861.10.05	IMPLEMENT A COMMUNICATIONS CONFIGURATION		X				2	Pvt	3-XF-105
6)	0861.10.06	ENTER DISTRIBUTION DATA		X				2	Pvt	3-XF-105
7)	0861.10.07	INPUT FIRE SUPPORT TACTICAL DATA SYSTEM (FSTDS) DATABASE UPDATES		X				2	Pvt	3-XF-106
8)	0861.10.08	ENTER TARGET GUIDANCES		X				2	Pvt	3-XF-106
9)	0861.10.09	ENTER FIRE SUPPORT ATTACK GUIDANCES		X				2	Pvt	3-XF-106
10)	0861.10.10	ENTER UNIT AND SENSOR GUIDANCES		X				2	Pvt	3-XF-107
11)	0861.10.11	ENTER FIELD ARTILLERY (FA) ATTACK GUIDANCES		X				2	Pvt	3-XF-107
12)	0861.10.12	ENTER COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES		X				2	Pvt	3-XF-108
13)	0861.10.13	ENTER MISCELLANEOUS GUIDANCES		X				2	Pvt	3-XF-108
14)	0861.10.14	ENTER INTERVENTION POINT DATA		X				2	Pvt	3-XF-109
15)	0861.10.15	PROCESS TARGET REPORTS		X				2	Pvt	3-XF-109
16)	0861.10.16	PROCESS A FIRE REQUEST		X				2	Pvt	3-XF-110
17)	0861.10.17	ENTER A FIRE SUPPORT PLAN		X				2	Pvt	3-XF-110
18)	0861.10.18	BUILD A SCHEDULE OF FIRES		X				2	Pvt	3-XF-111
19)	0861.10.19	IMPLEMENT A PLANNED SITUATION INTO CURRENT		X				2	Pvt	3-XF-111
20)	0861.10.20	ENTER UNIT MOVEMENT INFORMATION		X				2	Pvt	3-XF-112
21)	0861.10.21	PERFORM CONTINUOUS OPERATIONS (CONOPS)		X				2	Pvt	3-XF-112
22)	0861.10.22	BUILD AN AIR SUPPORT LIST (ASL)		X				2	Pvt	3-XF-113
23)	0861.10.23	PROCESS AN AIR SUPPORT LIST (ASL)		X				2	Pvt	3-XF-113
24)	0861.10.24	TAKE ACTION UPON RECEIPT OF AN AIR TASKING ORDER (ATO)		X				2	Pvt	3-XF-114
25)	0861.10.25	TAKE ACTION UPON RECEIPT OF AN AIRSPACE COORDINATION ORDER (ACO)		X				2	Pvt	3-XF-114
26)	0861.10.26	PROCESS AN IMMEDIATE AIR SUPPORT REQUEST (ASR)		X				2	Pvt	3-XF-115
27)	0861.10.27	CREATE A TRIGGER EVENT		X				2	Pvt	3-XF-115
28)	0861.10.28	TAKE ACTIONS UPON A TRIGGERED EVENT BEING TRIPPED		X				2	Pvt	3-XF-115

DUTY AREA 11 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) SUPERVISOR

1)	0861.11.01	DIRECT THE ESTABLISHMENT OF A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)		X				2	Sgt	3-XF-116
2)	0861.11.02	DIRECT THE ESTABLISHMENT OF A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)		X				2	Sgt	3-XF-116
3)	0861.11.03	DIRECT EXIT PROCEDURES		X				2	Sgt	3-XF-117
4)	0861.11.04	PLAN A COMMUNICATIONS CONFIGURATION		X				2	Sgt	3-XF-118
5)	0861.11.05	PLAN A DATA DISTRIBUTION SCHEME		X				2	Sgt	3-XF-118

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
6)	0861.11.06	SUPERVISE THE ENTRY OF A PLANNED COMMUNICATIONS CONFIGURATION		X			2	Sgt		3-XF-119
7)	0861.11.07	SUPERVISE THE IMPLEMENTATION OF A PLANNED COMMUNICATIONS CONFIGURATION		X			2	Sgt		3-XF-119
8)	0861.11.08	SUPERVISE THE ENTRY OF THE DISTRIBUTION DATA		X			2	Sgt		3-XF-120
9)	0861.11.09	SUPERVISE FIRE SUPPORT TACTICAL DATA SYSTEM (FSTDs) DATABASE INPUT		X			2	Sgt		3-XF-120
10)	0861.11.10	ESTABLISH TARGET GUIDANCES		X			2	Sgt		3-XF-121
11)	0861.11.11	ESTABLISH FIRE SUPPORT (FS) ATTACK GUIDANCES		X			2	Sgt		3-XF-121
12)	0861.11.12	ESTABLISH UNIT AND SENSOR GUIDANCES		X			2	Sgt		3-XF-122
13)	0861.11.13	ESTABLISH FIELD ARTILLERY (FA) ATTACK GUIDANCES		X			2	Sgt		3-XF-122
14)	0861.11.14	ESTABLISH COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES		X			2	Sgt		3-XF-122
15)	0861.11.15	ESTABLISH MISCELLANEOUS GUIDANCES		X			2	Sgt		3-XF-123
16)	0861.11.16	DIRECT ESTABLISHMENT OF INTERVENTION POINT DATA		X			2	Sgt		3-XF-123
17)	0861.11.17	SUPERVISE TARGET REPORT PROCESSING		X			2	Sgt		3-XF-124
18)	0861.11.18	SUPERVISE FIRE REQUEST PROCESSING		X			2	Sgt		3-XF-124
19)	0861.11.19	DEVELOP A FIRE SUPPORT PLAN		X			2	Sgt		3-XF-125
20)	0861.11.20	DEVELOP A SCHEDULE OF FIRES		X			2	Sgt		3-XF-125
21)	0861.11.21	SUPERVISE THE IMPLEMENTATION OF A PLANNED SITUATION INTO CURRENT		X			2	Sgt		3-XF-126
22)	0861.11.22	PLAN UNIT MOVEMENT		X			2	Sgt		3-XF-126
23)	0861.11.23	PLAN CONTINUITY OF OPERATIONS (CONOPS)		X			2	Sgt		3-XF-127
24)	0861.11.24	SUPERVISE CONTINUITY OF OPERATIONS (CONOPS) EXECUTION		X			2	Sgt		3-XF-128
25)	0861.11.25	SUPERVISE THE DEVELOPMENT OF AN AIR SUPPORT LIST (ASL)		X			2	Sgt		3-XF-128
26)	0861.11.26	SUPERVISE THE PROCESSING OF THE AIR SUPPORT LIST (ASL)		X			2	Sgt		3-XF-129
27)	0861.11.27	SUPERVISE ACTIONS UPON RECEIPT OF AN AIR TASKING ORDER (ATO)		X			2	Sgt		3-XF-129
28)	0861.11.28	SUPERVISE ACTION ON RECEIPT OF AN AIRSPACE COORDINATION ORDER (ACO)		X			2	Sgt		3-XF-130
29)	0861.11.29	DIRECT A REQUEST FOR IMMEDIATE CLOSE AIR SUPPORT (CAS)		X			2	Sgt		3-XF-130
30)	0861.11.30	DIRECT THE CREATION OF A TRIGGER EVENT		X			2	Sgt		3-XF-130
31)	0861.11.31	DIRECT ACTIONS FOR A TRIPPED TRIGGER EVENT		X			2	Sgt		3-XF-131

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Appendix C to
ENCLOSURE (3)

COMMON INDIVIDUAL TRAINING STANDARDS

1. General. This enclosure lists the ITS tasks common to more than one MOS within the OccFld. It is designed to assist the trainer in consolidating training for common tasks.

2. Format. The columns are as follows:

- a. TASK TITLE. A listing of all tasks common to at least two MOSs.
- b. COMMON TASK NUMBERS. A listing of the ITS designators for all ITSs containing the same task title.

TASK TITLE	COMMON TASK NUMBERS		
ADJUST FINAL PROTECTIVE FIRES	0802.01.22	0861.03.27	
ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)	0840.02.03	0861.04.21	
APPLY THE PRINCIPLE OF ARTILLERY BALLISTICS TO ARTILLERY FIRES	0802.02.01	0848.01.01	
BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)	0811.02.25	0811.06.01	
BRIEF A MANEUVER COMMANDER ON THE FIRE SUPPORT PLAN	0802.04.05	0840.02.02	
BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE CONSIDERATIONS OF EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT FOR AN AMPHIBIOUS OPERATION	0840.01.03	0845.03.03	
BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE GENERAL MISSION AND CHARACTERISTICS OF NAVAL GUNFIRE (NGF) EMPLOYED IN AN AMPHIBIOUS OPERATION	0840.01.02	0845.03.02	0861.04.28
BUILD A SCHEDULE OF FIRES	0844.29.17	0861.10.18	
CONDUCT A COORDINATED ILLUMINATION MISSION	0802.01.17	0861.03.21	
CONDUCT A COPPERHEAD MISSION	0802.01.33	0861.03.41	
CONDUCT A DANGER CLOSE FIRE MISSION	0802.01.20	0845.02.08	0861.03.24
CONDUCT A DESTRUCTION MISSION	0802.01.25	0845.02.23	0861.03.30
CONDUCT A DPICM MISSION	0802.01.19	0861.03.23	
CONDUCT A FASCAM MISSION	0802.01.18	0861.03.22	
CONDUCT A FIRE FOR EFFECT (FFE) MISSION	0802.01.15	0861.03.19	
CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	0802.01.12	0861.03.16	
CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	0845.02.11	0861.03.50	
CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	0845.02.07	0861.03.46	
CONDUCT A HIGH-BURST OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION	0802.01.28	0861.03.34	
CONDUCT A MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	0802.01.30	0861.03.36	

TASK TITLE	COMMON TASK NUMBERS		
CONDUCT A MISSION ON A MOVING TARGET	0802.01.26	0861.03.31	
CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION	0845.02.30	0861.03.53	
CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	0845.02.13	0861.03.52	
CONDUCT A PRECISION REGISTRATION, QUICK AND TIME	0802.01.27	0861.03.33	
CONDUCT A QUICK SMOKE MISSION	0802.01.24	0861.03.29	
CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION	0802.01.35	0845.02.06	
CONDUCT AN ABBREVIATED REGISTRATION	0802.01.29	0861.03.35	
CONDUCT AN ADJUST FIRE MISSION	0802.01.09 0861.03.11	0844.12.36	0845.02.05
CONDUCT AN ILLUMINATION MISSION	0802.01.16	0845.02.10	0861.03.20
CONDUCT AN IMMEDIATE SMOKE MISSION	0802.01.23	0861.03.28	
CONDUCT AN IMMEDIATE SUPPRESSION MISSION	0802.01.14	0844.12.37	0861.03.18
CONDUCT FIRE MISSION ON IRREGULARLY SHAPED TARGETS	0802.01.32	0861.03.40	
CONDUCT SIMULTANEOUS MISSIONS WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	0845.02.12	0861.03.51	
CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION	0802.05.03	0811.04.12	
CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY	0802.01.21	0861.03.26	
CONSTRUCT A TERRAIN SKETCH	0802.01.04	0845.02.29	0861.03.05
COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION	0802.04.13	0861.04.19	
COORDINATE FIRES ACROSS BOUNDARIES	0840.02.19	0861.04.15	
COORDINATE LOGISTICS	0802.11.01	0811.05.10	
CREATE A TRIGGER EVENT	0844.29.21	0861.10.27	
DECLINATE AN M2 COMPASS USING THE FIELD EXPEDIENT METHOD	0845.04.01	0861.01.01	
DECLINATE THE AIMING CIRCLE	0802.03.06	0811.04.08	
DECLINATE THE M2 COMPASS	0802.03.09	0811.04.09	
DETERMINE A POSITION WITH THE AN/PSN-11 (PLGR) IN THE AVERAGING MODE	0844.28.06	0845.04.13	
DETERMINE AND ANNOUNCE THE BATTERY FIRE ORDER	0848.01.04	0848.16.02	
DETERMINE DIRECTION TO TWO TARGETS	0845.02.28	0861.03.04	
DETERMINE LOCATION WITH THE AN/GVS-5 LASER RANGE FINDER	0845.04.06	0861.01.06	
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST	0845.04.08	0861.01.08	

TASK TITLE	COMMON TASK NUMBERS		
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING SELF-LOCATION PROCEDURE	0845.04.10	0861.01.10	
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS	0845.04.09	0861.01.09	
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO KNOWN POINTS	0845.04.07	0861.01.07	
DETERMINE MUZZLE VELOCITY VARIANCES (MVVS) BASED ON SHOOTING STRENGTH AND PROPELLANT EFFICIENCIES	0844.18.03	0848.19.03	
DETERMINE OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	0802.07.03	0861.07.03	
DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP	0845.04.12	0861.01.12	
DETERMINE WHETHER A HOWITZER IS SAFE TO FIRE	0802.03.15	0811.03.04	
DEVELOP A QUICK FIRE SUPPORT PLAN	0802.04.11	0840.02.14	
DEVELOP A SCHEDULE OF FIRES	0802.09.19	0848.12.19	0861.11.20
DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN	0845.02.21	0861.04.09	
DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE	0802.01.34	0861.03.42	
DIRECT ACTIONS FOR A TRIPPED TRIGGER EVENT	0848.12.25	0861.11.31	
DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA	0802.12.01	0811.05.13	
DIRECT ESTABLISHMENT OF INTERVENTION POINT DATA	0802.09.16	0848.12.16	0861.11.16
DIRECT EXIT PROCEDURES	0802.09.03	0848.12.03	0861.11.03
DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT	0802.10.01	0811.05.09	
DIRECT THE CREATION OF A TRIGGER EVENT	0802.09.24	0848.12.24	0861.11.30
DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT	0802.05.02	0811.05.06	
DIRECT THE ESTABLISHMENT OF A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)	0802.09.02	0848.12.02	0861.11.02
DIRECT THE ESTABLISHMENT OF A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)	0802.09.01	0848.12.01	0861.11.01
EMPLOY THE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)	0845.02.19	0861.02.22	
ENTER A PLANNED COMMUNICATIONS CONFIGURATION	0844.29.04	0861.10.04	
ENTER COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES	0844.29.12	0861.10.12	
ENTER DISTRIBUTION DATA	0844.29.06	0861.10.06	
ENTER FIELD ARTILLERY (FA) ATTACK GUIDANCES	0844.29.11	0861.10.11	
ENTER FIRE SUPPORT ATTACK GUIDANCES	0844.29.09	0861.10.09	
ENTER INTERVENTION POINT DATA	0844.29.14	0861.10.14	
ENTER MISCELLANEOUS GUIDANCES	0844.29.13	0861.10.13	

TASK TITLE	COMMON TASK NUMBERS		
ENTER TARGET GUIDANCES	0844.29.08	0861.10.08	
ENTER UNIT AND SENSOR GUIDANCES	0844.29.10	0861.10.10	
ENTER UNIT MOVEMENT INFORMATION	0844.29.19	0861.10.20	
ESTABLISH A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)	0844.29.02	0861.10.02	
ESTABLISH A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)	0844.29.01	0861.10.01	
ESTABLISH COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES	0848.12.14	0861.11.14	
ESTABLISH COMMUNICATIONS PARAMETERS WITH THE OBSERVER DIGITAL TERMINAL (ODT)	0802.07.02	0861.07.02	
ESTABLISH FIELD ARTILLERY (FA) ATTACK GUIDANCES	0848.12.13	0861.11.13	
ESTABLISH FIRE SUPPORT (FS) ATTACK GUIDANCES	0848.12.11	0861.11.11	
ESTABLISH MISCELLANEOUS GUIDANCES	0848.12.15	0861.11.15	
ESTABLISH TARGET GUIDANCES	0848.12.10	0861.11.10	
ESTABLISH UNIT AND SENSOR GUIDANCES	0848.12.12	0861.11.12	
EVALUATE TARGETING INFORMATION	0840.02.18	0844.21.03	0861.04.12
IDENTIFY SIGNIFICANT WEATHER CHANGES	0847.01.14	0848.30.05	
IMPLEMENT A COMMUNICATIONS CONFIGURATION	0844.29.05	0861.10.05	
IMPLEMENT A PLANNED SITUATION INTO CURRENT	0844.29.18	0861.10.19	
INPUT A TARGET IN THE KNOWN POINT FILE WITH THE OBSERVER DIGITAL TERMINAL (ODT)	0802.07.08	0861.07.12	
INSTALL AN/MRC-138 RADIO SET	0845.02.16	0861.02.16	
INTEGRATE COMPANY ORGANIC INDIRECT FIRE WEAPONS INTO FIRE PLANS	0802.01.36	0861.04.27	
LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY	0802.03.20	0811.05.04	
LAY THE FIRING BATTERY	0802.03.03	0811.04.03	
LOAD AND FIRE A PREPARED ROUND	0811.01.24	0811.06.08	
LOCATE A TARGET BY GRID COORDINATES	0802.01.06	0845.02.01	0861.03.07
LOCATE A TARGET BY POLAR PLOT	0802.01.07	0845.02.02	0861.03.08
LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	0802.01.08	0845.02.03	0861.03.09
LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM	0840.02.17	0861.04.10	
LOCATE POSITION ON A MAP OR GROUND BY RESECTION	0845.04.11	0861.01.11	
LOCATE POSITIONS IN A MOBILE ENVIRONMENT	0845.04.05	0861.01.05	
LOCATE YOUR POSITION DURING A TERRAIN WALK	0845.04.03	0861.01.03	
MAINTAIN CLASS V SMALL-ARMS AMMO BASIC LOAD AND SUPPLIES	0802.11.02	0811.05.11	

TASK TITLE	COMMON TASK NUMBERS		
MAINTAIN COMMUNICATIONS EQUIPMENT	0845.02.20	0861.02.23	
MEASURE ANGULAR DEVIATION WITH YOUR HAND	0845.02.04	0861.03.10	
MEASURE THE AZIMUTH OF THE LINE OF FIRE	0802.03.08	0811.04.05	
MEASURE THE ORIENTING ANGLE (OA)	0802.03.07	0811.04.04	
MONITOR/COORDINATE REQUESTS FOR NAVAL SURFACE FIRE SUPPORT (NSFS)	0840.02.22	0861.04.18	
NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	0802.03.10 0845.04.04	0802.05.06 0861.01.04	0811.01.02
OPERATE AN AN/MRC-138 RADIO SET	0845.02.17	0861.02.17	
OPERATE AN AN/PRC-104 RADIO SET	0845.02.15	0861.02.15	
PERFORM CONTINUOUS OPERATIONS (CONOPS)	0844.29.20	0861.10.21	
PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS	0811.04.14	0861.05.03	
PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS	0811.04.13	0861.05.01	
PERFORM DATUM TO DATUM TRANSFORMATION COMPUTATIONS	0844.12.18	0848.13.18	
PERFORM EXIT PROCEDURES	0844.29.03	0861.10.03	
PERFORM FIRE CONTROL ALIGNMENT TESTS	0811.02.32	0811.06.12	
PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)	0844.28.05	0845.04.14	
PERFORM PREFIRE CHECKS	0811.01.27	0811.06.11	
PERFORM SHELL FRAGMENT ANALYSIS	0802.03.19 0861.05.04	0811.04.15	0844.12.34
PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	0802.01.03	0845.02.27	0861.03.03
PLAN A COMMUNICATIONS CONFIGURATION	0802.09.04	0848.12.04	0861.11.04
PLAN A DATA DISTRIBUTION SCHEME	0802.09.05	0848.12.05	0861.11.05
PLAN CONTINUITY OF OPERATIONS (CONOPS)	0802.09.22	0848.12.22	0861.11.23
PLAN UNIT MOVEMENT	0802.09.21	0848.12.21	0861.11.22
POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)	0840.02.15	0861.04.02	
PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)	0840.02.16	0861.04.03	
PREPARE A TARGET BULLETIN (TARBUL)	0802.04.09	0840.02.07	0861.04.06
PREPARE A TARGET LIST WORKSHEET AND SCHEDULING WORKSHEETS	0802.04.03	0840.02.06	
PREPARE A VISIBILITY DIAGRAM	0802.01.05	0845.02.22	0861.03.06
PREPARE THE EXECUTIVE OFFICER'S (XO'S) REPORT	0802.03.04	0811.05.02	
PREPARE THE FIRE SUPPORT EXECUTION MATRIX	0802.04.15	0840.02.09	
PREPARE THE OBSERVER DIGITAL TERMINAL (ODT) FOR OPERATION	0802.07.01	0861.07.01	

TASK TITLE	COMMON TASK NUMBERS		
PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET	0845.02.18	0861.02.18	
PREPARE/SUBMIT A LIST OF TARGETS	0840.02.05	0861.04.04	
PROCESS A FIRE REQUEST	0844.29.16	0861.10.16	
PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST	0802.04.10	0861.04.08	
PROCESS TARGET REPORTS	0844.29.15	0861.10.15	
RECOMMEND PLANS, ORGANIZATION, AND EMPLOYMENT OF RADAR SET AN/TPQ-46	0802.15.01	0848.27.01	
RECORD THE HISTORICAL MUZZLE VELOCITY (FIRST LOT CALIBRATION) AND INFER A SECOND LOT CALIBRATION USING THE MUZZLE VELOCITY RECORD (DA FORM 4982-R)	0844.18.02	0848.19.02	
REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	0845.02.09	0861.03.48	
REPORT OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)	0802.07.04	0861.07.04	
REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE OBSERVER DIGITAL TERMINAL (ODT)	0802.07.07	0861.07.11	
SET UP AND RECOVER THE M2A2 AIMING CIRCLE	0802.03.17	0811.04.02	
SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE	0811.02.28	0811.06.05	
SUPERVISE A BATTERY DISPLACEMENT	0802.05.05	0811.05.07	
SUPERVISE A TACTICAL ROAD MARCH	0802.05.04	0811.05.08	
SUPERVISE AMMUNITION MANAGEMENT ON THE GUN LINE	0802.03.22	0811.05.18	
SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING	0802.05.07	0811.05.21	
SUPERVISE CONTINUITY OF OPERATIONS (CONOPS) EXECUTION	0802.09.23	0848.12.23	0861.11.24
SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT	0802.12.03	0811.05.15	
SUPERVISE EMBARKATION	0802.13.01	0811.05.17	
SUPERVISE FIRE REQUEST PROCESSING	0802.09.18	0848.12.18	0861.11.18
SUPERVISE ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) DATABASE INPUT	0848.12.09	0861.11.09	
SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT	0802.12.02	0811.05.14	
SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT	0802.03.12	0811.02.23	
SUPERVISE TARGET REPORT PROCESSING	0802.09.17	0848.12.17	0861.11.17
SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION	0803.01.07	0848.13.36	
SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS	0802.02.12	0848.01.07	0848.26.02
SUPERVISE THE CONSTRUCTION AND MAINTENANCE OF A TACTICAL SITUATION MAP	0802.02.06	0848.01.05	
SUPERVISE THE ENTRY OF A PLANNED COMMUNICATIONS CONFIGURATION	0802.09.06	0848.12.06	0861.11.06

TASK TITLE	COMMON TASK NUMBERS		
SUPERVISE THE ENTRY OF THE DISTRIBUTION DATA	0802.09.08	0848.12.08	0861.11.08
SUPERVISE THE IMPLEMENTATION OF A PLANNED COMMUNICATIONS CONFIGURATION	0802.09.07	0848.12.07	0861.11.07
SUPERVISE THE IMPLEMENTATION OF A PLANNED SITUATION INTO CURRENT	0802.09.20	0848.12.20	0861.11.21
SUPERVISE THE OPERATIONS OF A FIRE SUPPORT COORDINATION CENTER (FSCC)	0802.04.08	0840.02.13	
SUPERVISE THE PERFORMANCE OF PLGR TO PLGR OPERATIONS	0802.14.09	0848.24.09	
SUPERVISE THE PERFORMANCE OF THE SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)	0802.14.01	0848.24.01	
SUPERVISE THE PICKUP AND DELIVERY OF DESIGNATED CLASSES OF SUPPLY	0802.11.03	0811.05.12	
SUPERVISE THE PREPARATION OF A PROJECTILE FOR FIRING	0802.03.16	0811.03.17	
SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS	0802.15.02	0848.29.01	
SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS	0802.15.03	0848.29.03	
TAKE ACTIONS UPON A TRIGGERED EVENT BEING TRIPPED	0844.29.22	0861.10.28	
TAKE IMMEDIATE ACTION FOR MISFIRE	0811.01.26	0811.06.14	
TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE OBSERVER DIGITAL TERMINAL (ODT)	0802.07.06	0861.07.10	
VERIFY FIRE CONTROL ALIGNMENT TESTS	0811.03.19	0811.06.13	
VERIFY OBSERVER DIGITAL TERMINAL (ODT) INITIALIZATION	0802.07.09	0861.07.13	
VERIFY OBSERVER DIGITAL TERMINAL (ODT) INPUT MESSAGES	0802.07.10	0861.07.14	
VERIFY THE M94 VELOCIMETER DATA	0844.18.01	0848.19.01	

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Appendix D to
ENCLOSURE (3)

TRAINING SUPPORT

1. This enclosure summarizes five categories of training support by ITS for the entire OccFld:

Annex I: References

Annex II: Training Materiel

Annex III: Ammunition, Explosives, and Pyrotechnics

Annex IV: Distance Learning Products

Annex V: Performance Support Tools

2. If support identified in any appendix is not applicable to this OccFld, the appendix will include a statement to that effect.

Appendix E to
ENCLOSURE (3)

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Appendix E to
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Appendix E to
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Appendix E to
ENCLOSURE (3)

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REFERENCES

1. General. References are doctrinal publications, technical manuals, and other publications upon which an ITS and its performance steps are based. They should be readily available and provide the detailed procedures for accomplishing the task. This section includes a list of all reference publications associated with any task in this OccFld.

2. Format. The columns are as follows:

a. REFERENCES. This column summarizes all references associated with at least one ITS task in this OccFld.

b. TASK NUMBERS. A listing of all ITS tasks to which the corresponding reference is associated.

REFERENCES	TASK NUMBERS			
Applicable Tactical OPSCODE (AKAC 130, etc.)	0861.02.02			
BCT Job Aids	0802.08.01	0802.08.04	0802.08.06	0802.08.09
	0802.08.10	0802.08.11	0802.08.12	0802.08.13
	0802.08.14	0802.08.15	0848.31.01	0848.31.02
	0848.31.03	0848.32.01	0848.32.02	0848.32.03
	0848.33.01	0848.33.02	0848.33.03	0848.34.01
	0848.34.02	0848.35.01	0848.35.02	0848.36.01
	0848.36.02	0848.36.03	0848.36.04	0861.08.09
	0861.08.10	0861.08.11	0861.08.12	0861.08.13
	0861.08.14	0861.08.15	0861.09.03	0861.09.04
	0861.09.05	0861.09.06	0861.09.07	0861.09.08
	0861.09.09	0861.09.10	0861.09.11	
Battle Drill Guide (BDG) System Book Five A	0802.06.03	0848.23.01	0848.23.02	0848.37.01
	0848.37.02	0848.37.03	0848.37.04	
Computer System's User Manual DEP 7025-10-1	0844.12.15	0848.13.15		
	0861.10.01			
DI-3000 User's Manual	0844.12.01	0844.12.02	0848.13.01	0848.13.02
Defense Intelligence Agency (DIA) Projectile Fragmentation Identification Guide	0803.01.08	0811.06.29	0844.12.34	0848.13.34
LCU Job Aids	0802.08.02	0802.08.03	0802.08.04	0802.08.05
	0802.08.06	0802.08.07	0844.23.01	0844.23.02
	0844.24.01	0844.24.02	0844.25.01	0844.25.02
	0844.26.01	0844.26.02	0844.27.01	0844.27.02
	0861.08.01	0861.08.02	0861.08.03	0861.08.04
	0861.08.05	0861.08.06	0861.08.07	0861.08.08
	0861.08.09	0861.08.10	0861.08.11	0861.08.12
	0861.08.13	0861.08.14	0861.08.15	0861.09.01
	0861.09.02	0861.09.03	0861.09.04	0861.09.05
	0861.09.06	0861.09.07	0861.09.08	0861.09.09
	0861.09.10	0861.09.11		
MCFSS (TPM).	0844.23.01	0844.23.02	0844.24.01	0844.24.02
	0844.25.01	0844.25.02	0844.26.01	0844.26.02
	0844.27.01	0844.27.02		
MCFSS SOP	0802.08.01	0802.08.02	0802.08.03	0802.08.04
	0802.08.05	0802.08.06	0802.08.07	0802.08.08
	0802.08.09	0802.08.10	0802.08.11	0802.08.12
	0802.08.13	0802.08.14	0802.08.15	0848.04.03
	0848.04.04	0848.04.06	0848.04.08	0848.05.01
	0848.05.02	0848.05.03	0848.05.04	0848.05.05

REFERENCES	TASK NUMBERS			
	0848.05.06	0848.05.07	0848.06.01	0848.06.02
	0848.06.03	0848.06.04	0848.06.06	
MCFSS Version 9.57 SOP	0802.07.01	0802.07.02	0802.07.03	0802.07.04
	0802.07.05	0802.07.06	0802.07.07	0802.07.08
	0802.07.09	0802.07.10	0848.31.01	0848.31.02
	0848.31.03	0848.32.01	0848.32.02	0848.32.03
	0848.33.01	0848.33.02	0848.33.03	0848.34.01
	0848.34.02	0848.35.01	0848.35.02	0848.36.01
	0848.36.02	0848.36.03	0848.36.04	0861.07.01
	0861.07.02	0861.07.03	0861.07.04	0861.07.05
	0861.07.06	0861.07.07	0861.07.08	0861.07.09
	0861.07.10	0861.07.11	0861.07.12	0861.07.13
	0861.07.14	0861.07.15	0861.08.01	0861.08.02
	0861.08.03	0861.08.04	0861.08.05	0861.08.06
	0861.08.07	0861.08.08	0861.08.09	0861.08.10
	0861.08.11	0861.08.12	0861.08.13	0861.08.14
	0861.08.15	0861.09.01	0861.09.02	0861.09.03
	0861.09.04	0861.09.05	0861.09.06	0861.09.07
	0861.09.08	0861.09.09	0861.09.10	0861.09.11
ODT Job Aids	0802.07.01	0802.07.02	0802.07.03	0802.07.04
	0802.07.05	0802.07.06	0802.07.07	0802.07.08
	0802.07.09	0802.07.10	0802.08.01	0802.08.02
	0802.08.03	0802.08.05	0802.08.07	0802.08.08
	0802.08.09	0802.08.10	0802.08.11	0802.08.13
	0802.08.14	0802.08.15	0861.07.01	0861.07.02
	0861.07.03	0861.07.04	0861.07.05	0861.07.06
	0861.07.07	0861.07.08	0861.07.09	0861.07.10
	0861.07.11	0861.07.12	0861.07.13	0861.07.14
	0861.07.15	0861.08.01	0861.08.02	
ODT Operations Manual	0802.07.01	0802.07.02	0802.07.03	0802.07.04
	0802.07.05	0802.07.06	0802.07.07	0802.07.08
	0802.07.09	0802.07.10	0861.07.01	0861.07.02
	0861.07.03	0861.07.04	0861.07.05	0861.07.06
	0861.07.07	0861.07.08	0861.07.09	0861.07.10
	0861.07.11	0861.07.12	0861.07.13	0861.07.14
	0861.07.15	0861.08.01	0861.08.02	
Psychro Metric slide #512395	0847.01.07			
Sunrise/Sunset Chart, Nautical Almanac Office, US Naval Observatory	0848.30.15			
T-2E User's Manual	0844.12.03	0844.12.04	0844.12.05	0844.12.06
	0844.12.08	0844.12.11	0848.13.03	0848.13.04
	0848.13.05	0848.13.06	0848.13.08	0848.13.11
TFT's and Addendums	0802.03.20	0811.05.04	0844.15.01	0848.16.06
User's Manual for AN/PPN-19 Radar Beacon	0845.02.19	0861.02.22		
Users Manual, AN/TMQ-50	0847.01.06			
Users Manual, Electronic Met Theodolite	0847.01.09	0847.01.10		
ACP 125(D), Communication Instructions for Radio Telephone Procedures	0861.02.04			
ACP 125, US SUPP 1, Allied Communication Publication	0842.01.01	0861.02.01	0861.02.20	
AR 105-3, Reporting Meaconing, Intrusion, Jamming and Interference of Elctromagnetic Systems	0861.02.24	0861.02.25		

REFERENCES	TASK NUMBERS			
ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support	0845.01.01	0845.02.01	0845.02.02	0845.02.03
	0845.02.06	0845.02.07	0845.02.08	0845.02.09
	0845.02.10	0845.02.11	0845.02.12	0845.02.13
	0845.02.14	0861.03.44	0861.03.45	0861.03.46
	0861.03.47	0861.03.48	0861.03.49	0861.03.50
	0861.03.51	0861.03.52		
ATP-38, Amphibious Operations	0861.02.05	0861.02.06		
ATP-4(D), Allied Spotting Procedures for Naval Gunfire Support	0802.01.31	0802.04.08	0840.02.13	
CEOI, Communications-Electronic Operating Instructions	0802.06.01	0802.06.02	0803.04.05	0842.01.01
	0842.01.02	0861.02.01	0861.02.24	0861.02.25
CFR-46, Shipping	0802.13.01	0811.05.17		
CFR-49, Transportation	0802.13.01	0811.05.17		
CONSURFWARDEVGRU TACMEMO PD 3410-1-97, Suppression of Enemy Air Defenses (SEAD)-Fire Mission using Naval Gunfire Support	0845.02.06	0861.03.45		
DA PAM 738-750, The Army Maintenance Management System (TAMMS)	0842.05.02			
DB-9-86, Laser Designators, Rangefinders, Seekers, and Guided Munitions	0802.01.02	0802.01.12	0861.03.16	
FC 6-40-2, Battery Computer System BCS Job Aids	0802.02.05	0802.02.09	0802.03.01	0802.03.02
	0802.08.01	0802.08.02	0802.08.03	0802.08.05
	0802.08.07	0802.08.08	0802.08.09	0802.08.10
	0802.08.11	0802.08.12	0802.08.13	0802.08.14
	0802.08.15			
FC 6-40-31, Backup Computer System Job Aids--Cannon Application	0802.02.08	0802.02.09	0802.02.11	0802.03.01
	0802.03.02			
FM 100-2-3, The Soviet Army	0861.04.07			
FM 100-5, Operations	0802.05.01	0803.03.07	0803.04.02	0803.04.03
	0803.04.06			
FM 101-5-1, Operational Terms and Symbols	0802.02.06	0802.02.12	0840.02.15	0840.02.16
	0844.20.01	0848.01.05	0848.01.07	0848.26.01
	0861.04.01	0861.04.02	0861.04.03	
FM 21-26, Map Reading and Land Navigation	0802.01.12	0802.03.10	0802.05.06	0803.01.02
	0803.02.04	0803.03.04	0811.01.02	0845.04.02
	0845.04.03	0845.04.04	0845.04.05	0845.04.06
	0845.04.11	0845.04.12	0847.01.13	0848.30.06
	0861.01.02	0861.01.03	0861.01.04	0861.01.05
	0861.01.06	0861.01.11	0861.01.12	
FM 21-60, Visual Signals	0811.01.17			
FM 23-27, MK 19 40mm Grenade Machinegun Mod 3	0802.05.07	0811.05.21		
FM 23-65, Browning Machine Gun, Caliber .50, HB M2	0802.05.07	0811.05.21		
FM 23-90, Mortars	0848.37.07	0848.37.10		
FM 23-91, Mortar Gunnery	0848.37.01	0848.37.02	0848.37.03	0848.37.04
	0848.37.05	0848.37.06	0848.37.08	0848.37.09
FM 24-1, Combat Communications	0842.01.01	0842.01.02	0861.02.01	0861.02.24

REFERENCES	TASK NUMBERS			
FM 24-18, Communications Techniques	0802.06.03	0842.01.01	0845.02.20	0845.02.24
	0861.02.01	0861.02.04	0861.02.07	0861.02.23
FM 24-33, Communications Tech Electronic Counter-Countermeasures	0842.01.02	0861.02.24	0861.02.25	
FM 3-100, NBC Operations	0802.12.01	0802.12.04	0811.05.13	0811.05.16
FM 3-3, NBC Contamination Avoidance	0802.12.01	0802.12.04	0811.05.13	0811.05.16
FM 3-4, NBC Protection	0802.12.01	0802.12.04	0811.05.13	0811.05.16
FM 3-5, NBC Decontamination	0802.12.01	0802.12.02	0802.12.03	0811.05.13
	0811.05.14	0811.05.15		
FM 34-130, Intelligence Preparation of the Battlefield	0803.03.07	0803.04.02	0803.04.04	0803.04.05
	0803.04.06			
FM 55-450-1, Army Helicopter External Load Operations	0842.04.03	0848.27.03		
FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition	0802.03.18	0802.03.19	0802.04.14	0802.15.01
	0802.15.02	0802.15.03	0803.04.05	0811.04.13
	0811.04.14	0811.04.15	0842.01.02	0842.02.03
	0842.03.05	0844.12.33	0844.12.34	0844.21.03
	0844.21.04	0844.21.05	0848.13.33	0848.13.34
	0848.27.01	0848.27.02	0848.27.03	0848.27.04
	0848.28.01	0848.28.02	0848.29.01	0848.29.02
	0848.29.03	0861.04.23	0861.05.01	0861.05.02
	0861.05.03	0861.05.04	0861.05.05	
FM 6-121-1, Joint Munitions Effect Manual (JMEM)	0848.01.03	0848.01.04		
FM 6-16-2, Tables for Artillery Met, Visual Ballistic Type 3 , Computer Met Message and Limited Surface Observation	0847.01.12	0848.30.03		
FM 6-20, Fire Support in Airland Battle	0803.04.04	0861.04.07	0861.04.25	0861.04.26
FM 6-20-1 (HTF), Field Artillery Cannon Battalion	0802.05.05	0803.04.04	0811.05.07	0844.12.47
	0848.13.47			
FM 6-20-10, The Targeting Process	0803.04.01	0803.04.04	0803.04.05	0803.04.06
FM 6-20-30, Fire Support For Corps and Division	0802.04.04	0802.04.08	0802.04.12	0802.04.14
	0803.04.04	0803.04.06	0840.02.01	0840.02.03
	0840.02.13	0840.02.20	0840.02.21	0845.03.01
	0861.04.13	0861.04.14	0861.04.16	0861.04.17
	0861.04.21	0861.04.23	0861.04.25	0861.04.26
FM 6-20-40, Fire Support For Brigade Operations (Heavy)	0802.01.01	0802.01.31	0802.01.34	0802.04.01
	0802.04.02	0802.04.03	0802.04.04	0802.04.05
	0802.04.06	0802.04.08	0802.04.11	0802.04.12
	0802.04.13	0802.04.14	0802.04.15	0803.04.03
	0803.04.04	0840.02.01	0840.02.02	0840.02.03
	0840.02.04	0840.02.05	0840.02.06	0840.02.08
	0840.02.09	0840.02.13	0840.02.14	0840.02.17
	0840.02.18	0840.02.19	0840.02.20	0840.02.21
	0840.02.22	0840.02.23	0844.20.02	0844.20.04
	0844.21.01	0844.21.03	0845.02.21	0845.03.01
	0848.26.01	0848.26.02	0848.26.03	0861.03.42
	0861.04.04	0861.04.05	0861.04.07	0861.04.09
	0861.04.10	0861.04.12	0861.04.13	0861.04.14
	0861.04.15	0861.04.16	0861.04.17	0861.04.18
	0861.04.19	0861.04.20	0861.04.21	0861.04.22
	0861.04.23	0861.04.25	0861.04.26	

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FM 6-20-50, Fire Support For Brigade Operations (Light)	0802.01.01	0802.01.31	0802.01.34	0802.04.01
	0802.04.02	0802.04.03	0802.04.05	0802.04.08
	0802.04.11	0802.04.12	0802.04.13	0802.04.14
	0802.04.15	0803.04.03	0803.04.04	0803.04.06
	0840.02.01	0840.02.02	0840.02.03	0840.02.04
	0840.02.05	0840.02.06	0840.02.09	0840.02.13
	0840.02.14	0840.02.17	0840.02.18	0840.02.19
	0840.02.20	0840.02.21	0840.02.22	0840.02.23
	0844.20.02	0844.20.04	0844.21.01	0844.21.03
	0845.02.21	0845.03.01	0848.26.01	0848.26.02
	0848.26.03	0861.03.42	0861.04.04	0861.04.05
	0861.04.07	0861.04.09	0861.04.10	0861.04.12
	0861.04.13	0861.04.14	0861.04.15	0861.04.16
	0861.04.17	0861.04.18	0861.04.19	0861.04.20
	0861.04.21	0861.04.22	0861.04.23	0861.04.25
	0861.04.26			
FM 6-30, Observed Fire Procedures	0802.01.01	0802.01.02	0802.01.03	0802.01.04
	0802.01.06	0802.01.07	0802.01.08	0802.01.09
	0802.01.10	0802.01.11	0802.01.12	0802.01.13
	0802.01.14	0802.01.15	0802.01.16	0802.01.17
	0802.01.18	0802.01.19	0802.01.20	0802.01.21
	0802.01.22	0802.01.23	0802.01.24	0802.01.25
	0802.01.26	0802.01.27	0802.01.28	0802.01.29
	0802.01.30	0802.01.31	0802.01.32	0802.01.33
	0802.01.34	0802.04.04	0802.04.08	0803.01.07
	0840.01.02	0840.01.03	0840.01.04	0840.02.13
	0844.12.36	0844.12.37	0845.01.01	0845.02.01
	0845.02.02	0845.02.03	0845.02.04	0845.02.05
	0845.02.07	0845.02.08	0845.02.23	0845.02.25
	0845.02.26	0845.02.27	0845.02.28	0845.02.29
	0845.03.02	0845.03.03	0848.13.36	0848.13.37
	0848.16.04	0861.03.01	0861.03.02	0861.03.03
	0861.03.04	0861.03.05	0861.03.07	0861.03.08
	0861.03.09	0861.03.10	0861.03.11	0861.03.13
	0861.03.16	0861.03.17	0861.03.18	0861.03.19
	0861.03.20	0861.03.21	0861.03.22	0861.03.23
	0861.03.24	0861.03.26	0861.03.27	0861.03.28
	0861.03.29	0861.03.30	0861.03.31	0861.03.32
	0861.03.33	0861.03.34	0861.03.35	0861.03.36
	0861.03.37	0861.03.38	0861.03.40	0861.03.41
	0861.03.42	0861.03.44	0861.03.46	0861.03.47
	0861.04.07	0861.04.28	0861.04.29	0861.07.05
	0861.07.07			
FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery	0802.02.01	0802.02.02	0802.02.10	0848.01.01
	0848.01.08	0848.01.09	0848.01.10	
FM 7-7, Mechanized Infantry Platoon and Squad	0802.04.01			
FM 7-90, Tactical Employment of Mortars	0848.37.05	0848.37.06	0848.37.07	0848.37.10
FM 71-1, Tank and Mechanized Company Team	0802.04.01			
FM 90-2, Tactical Deception (How to Fight)	0802.05.01			
FM 90-3 (HTF), Desert Operations (How To Fight)	0802.03.10	0802.05.06	0811.01.02	0861.01.04
FMFM 1-7, Supporting Arms in Amphibious Operations	0802.01.31	0861.04.24		
FMFM 2-7-1, Fire Support Coordination by the MAGTF CE	0802.04.01	0802.04.05	0840.02.02	

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FMFM 3-30, Communications	0802.06.01	0802.06.02		
FMFM 4, Combat Service Support	0802.13.01	0811.05.17		
FMFM 4-1, Combat Service Support Operations	0802.11.01	0811.05.10		
FMFM 4-6, Air Movement of FMF Units	0802.13.01	0811.05.17		
FMFM 4-9, Motor Transport	0802.05.04	0802.13.01	0811.05.08	0811.05.17
FMFM 5-1, Marine Aviation	0802.04.01	0802.04.08	0840.02.13	
FMFM 5-4, Offensive Air Support	0802.01.34	0802.04.01	0802.04.08	0802.04.10
	0802.04.13	0840.02.13	0861.03.42	0861.04.08
	0861.04.19	0861.04.20		
FMFM 5-4A, Close Air Support and Close-In Fire Support	0802.01.34	0802.04.10	0802.04.13	0861.03.42
	0861.04.08	0861.04.19	0861.04.20	
FMFM 6-3, Marine Battalion	0802.06.01			
FMFM 7-90, Tactical Employment of Mortars	0802.04.01			
FMFM 9-1, Tank Employment/Countermechanized Operations	0802.04.01			
FMFM 9-2, Amphibious Vehicles	0802.04.01			
FMFRP 4-15, Commanders Guide to Maintenance	0802.10.01	0811.05.09		
FMFRP 5-31, Helicopter External Air Transport Procedures	0811.03.10	0811.03.21	0811.06.17	
FMH #1, Federal Meteorological Handbook, Surface Observations	0847.01.14	0848.30.03	0848.30.05	
FMH #4, Federal Meteorology Handbook, Radiosonde Code	0848.30.03			
FMH #6, Federal Meteorology Handbook, Upper Wind Codes	0848.30.03			
GMET, Graphical Munitions Effects Tables	0848.16.01			
GTA 6-7-3, OF Fan	0802.01.03	0845.02.27	0861.03.03	
JREGTO 3570.1_, Standard Operating Procedures for Field Artillery Safety	0802.02.11	0802.03.12	0802.03.15	0811.03.04
LFM 03, Amphibious Embarkation	0802.13.01	0811.05.17		
LO 11-5840-354-10, Lubrication Order for Radar Set AN/TPQ-36	0842.05.01	0848.28.03		
LO 9-1025-211-13, Howitzer, Medium Towed, 155mm M198	0811.03.18			
LO 9-2320-260-12, M809 Series Truck	0811.03.07			
LO 9-2320-272-12, Truck, 5-Ton, 6X6, M939 Series	0811.03.07			
MCIO P1500.44C, Battle Skills Training/Essential Skills Handbook	0802.12.02	0811.05.14	0861.02.21	

Annex I to
Appendix E to
ENCLOSURE (3)

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MCO 8010.1E, Class V Planning Factors for Fleet Marine Force Combat Operations	0802.11.02	0811.05.11		
MCO P4790.1B, Marine Corps Integrated Maintenance Management System Introduction	0802.10.01	0811.05.09		
MCO P4790.2, MIMMS Field Procedures	0803.01.06 0848.30.04	0803.02.02 0848.30.16	0803.02.06	0848.01.11
MCO P4790.2B, MIMMS Field Procedures Manual	0802.10.01	0811.05.09		
MCO P5215.17, The USMC Tech Pub System	0802.10.01	0811.05.09		
MCO P5600.31, Marine Corps Publications and Printing Regulations	0802.10.01	0811.05.09		
MCRP 3-0A, Unit Training Management Guide	0811.05.19	0811.05.20		
MCRP 3-0B, How to Conduct Training	0811.05.19	0811.05.20		
MCRP 3-16.1A, Marine Artillery Survey	0802.05.08 0803.01.04 0844.12.04 0844.12.38 0844.12.42 0844.12.46 0848.13.04 0848.13.38 0848.13.42 0848.13.46	0803.01.01 0844.12.01 0844.12.05 0844.12.39 0844.12.43 0848.13.01 0848.13.05 0848.13.39 0848.13.43	0803.01.02 0844.12.02 0844.12.06 0844.12.40 0844.12.44 0848.13.02 0848.13.06 0848.13.40 0848.13.44	0803.01.03 0844.12.03 0844.12.09 0844.12.41 0844.12.45 0848.13.03 0848.13.09 0848.13.41 0848.13.45
MCRP 3-16.1B, Army Ephemeris	0844.12.19	0848.13.15	0848.13.19	
MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination	0802.01.35 0802.04.01 0802.04.05 0802.04.09 0802.04.13 0802.06.02 0840.01.04 0840.01.08 0840.02.03 0840.02.07 0840.02.14 0840.02.18 0840.02.22 0844.21.03 0845.03.03 0848.26.02 0861.04.02 0861.04.07 0861.04.12 0861.04.16 0861.04.20 0861.04.24 0861.04.28	0802.01.36 0802.04.02 0802.04.06 0802.04.10 0802.04.14 0802.08.12 0840.01.05 0840.01.09 0840.02.04 0840.02.08 0840.02.15 0840.02.19 0840.02.23 0845.02.06 0848.01.05 0848.26.03 0861.04.03 0861.04.08 0861.04.13 0861.04.17 0861.04.21 0861.04.25 0861.04.29	0802.02.06 0802.04.03 0802.04.07 0802.04.11 0802.04.15 0840.01.02 0840.01.06 0840.02.01 0840.02.05 0840.02.09 0840.02.16 0840.02.20 0844.21.01 0845.03.01 0848.01.07 0861.03.43 0861.04.04 0861.04.09 0861.04.14 0861.04.18 0861.04.22 0861.04.26 0861.05.05	0802.02.12 0802.04.04 0802.04.08 0802.04.12 0802.06.01 0840.01.03 0840.01.07 0840.02.02 0840.02.06 0840.02.13 0840.02.17 0840.02.21 0844.21.02 0845.03.02 0848.26.01 0861.04.01 0861.04.05 0861.04.10 0861.04.15 0861.04.19 0861.04.23 0861.04.27
MCRP 3-16.25, Field Artillery Target Acquisition	0803.01.08 0803.03.06	0803.03.01 0803.03.07	0803.03.02 0803.04.02	0803.03.04 0803.04.04
MCRP 3-16.5A, Tables for Artillery Meteorology (Visual) Ballistic Type 3 and Computer Messages and Limited Surface Observations	0847.01.07	0847.01.11	0847.01.12	0847.01.14
MCRP 3-16.6A, Joint Fires	0802.04.16			

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MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198	0802.03.12	0802.03.13	0802.03.14	0802.03.16
	0802.03.22	0811.01.04	0811.01.05	0811.01.07
	0811.01.08	0811.01.10	0811.01.11	0811.01.12
	0811.01.13	0811.01.16	0811.01.22	0811.01.23
	0811.01.24	0811.01.25	0811.01.26	0811.01.27
	0811.02.01	0811.02.02	0811.02.03	0811.02.04
	0811.02.05	0811.02.14	0811.02.15	0811.02.16
	0811.02.17	0811.02.19	0811.02.20	0811.02.21
	0811.02.23	0811.02.25	0811.02.26	0811.02.27
	0811.02.28	0811.02.30	0811.02.31	0811.02.32
	0811.02.33	0811.02.34	0811.03.01	0811.03.02
	0811.03.06	0811.03.12	0811.03.14	0811.03.15
	0811.03.16	0811.03.17	0811.03.18	0811.03.19
	0811.03.20	0811.05.18		
MCTM 09814A-14&P, M94 Muzzle Velocity System	0802.02.03	0802.03.11	0811.01.20	0811.01.21
	0811.02.12	0844.18.03	0848.19.03	
MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)	0802.09.01	0802.09.02	0802.09.03	0802.09.04
	0802.09.05	0802.09.06	0802.09.07	0802.09.08
	0802.09.09	0802.09.10	0802.09.11	0802.09.12
	0802.09.13	0802.09.14	0802.09.15	0802.09.16
	0802.09.17	0802.09.18	0802.09.19	0802.09.20
	0802.09.21	0802.09.22	0802.09.23	0802.09.24
	0802.09.25	0844.29.01	0844.29.02	0844.29.03
	0844.29.04	0844.29.05	0844.29.06	0844.29.07
	0844.29.08	0844.29.09	0844.29.10	0844.29.11
	0844.29.12	0844.29.13	0844.29.14	0844.29.15
	0844.29.16	0844.29.17	0844.29.18	0844.29.19
	0844.29.20	0844.29.21	0844.29.22	0848.12.01
	0848.12.02	0848.12.03	0848.12.04	0848.12.05
	0848.12.08	0848.12.09	0848.12.10	0848.12.11
	0848.12.12	0848.12.13	0848.12.14	0848.12.15
	0848.12.16	0848.12.17	0848.12.18	0848.12.19
	0848.12.20	0848.12.21	0848.12.22	0848.12.23
	0848.12.24	0848.12.25	0861.10.01	0861.10.02
	0861.10.03	0861.10.04	0861.10.05	0861.10.06
	0861.10.07	0861.10.08	0861.10.09	0861.10.10
	0861.10.11	0861.10.12	0861.10.13	0861.10.14
	0861.10.15	0861.10.16	0861.10.17	0861.10.18
	0861.10.19	0861.10.20	0861.10.21	0861.10.22
	0861.10.23	0861.10.24	0861.10.25	0861.10.26
	0861.10.27	0861.10.28	0861.11.01	0861.11.02
	0861.11.03	0861.11.04	0861.11.05	0861.11.06
	0861.11.07	0861.11.08	0861.11.09	0861.11.10
	0861.11.11	0861.11.12	0861.11.13	0861.11.14
	0861.11.15	0861.11.16	0861.11.17	0861.11.18
	0861.11.19	0861.11.20	0861.11.21	0861.11.22
	0861.11.23	0861.11.24	0861.11.25	0861.11.26
	0861.11.27	0861.11.28	0861.11.29	0861.11.30
	0861.11.31			
MCWP 3-1.6.7, AFATDS TPM	0861.10.01			
MCWP 3-11.1, Marine Rifle Company/Platoon (FMFM 6-4)	0802.06.01	0848.37.05	0848.37.06	
MCWP 3-15.1, Machinegun and Machinegun Gunnery	0802.05.07	0811.04.01	0811.05.21	
MCWP 3-16, Fire Support Coordination	0803.04.06	0840.02.11	0840.02.12	0861.04.06
MCWP 3-16.1, Marine Artillery Support	0802.03.18	0802.03.19	0802.04.01	0802.04.02
	0802.04.03	0802.04.07	0802.04.08	0802.04.15
	0802.06.01	0802.06.02	0802.08.12	0811.04.13
	0811.04.14	0811.04.15	0840.02.06	0840.02.09
	0840.02.13	0844.12.47	0844.21.01	0844.21.03

REFERENCES	TASK NUMBERS			
	0848.13.47	0848.29.02	0861.04.24	0861.04.25
	0861.04.26	0861.05.01	0861.05.02	0861.05.03
	0861.05.04			
MCWP 3-16.1A, Field Artillery Survey	0803.01.06	0844.12.08	0844.12.11	0844.12.12
	0844.12.13	0844.12.14	0844.12.15	0844.12.16
	0844.12.17	0844.12.18	0844.12.19	0844.12.20
	0844.12.21	0844.12.22	0844.12.23	0844.12.24
	0844.12.25	0844.12.26	0844.12.27	0844.12.29
	0844.12.31	0848.13.08	0848.13.11	0848.13.12
	0848.13.13	0848.13.14	0848.13.15	0848.13.16
	0848.13.17	0848.13.18	0848.13.19	0848.13.20
	0848.13.21	0848.13.22	0848.13.23	0848.13.24
	0848.13.25	0848.13.26	0848.13.27	0848.13.29
	0848.13.31			
MCWP 3-16.1E, Combat Service Support for Artillery Units	0802.11.01	0802.11.02	0802.11.03	0811.05.10
	0811.05.11	0811.05.12		
MCWP 3-16.2, MCFSS Techniques and Procedures	0802.08.02	0802.08.04	0802.08.06	0802.08.07
	0802.08.08	0802.08.09	0802.08.10	0802.08.11
	0802.08.12	0802.08.13	0802.08.14	0802.08.15
	0803.04.06	0848.03.01	0848.03.03	0848.04.01
	0848.05.06	0848.05.07		
MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)	0802.09.01	0802.09.02	0802.09.03	0802.09.04
	0802.09.05	0802.09.06	0802.09.07	0802.09.08
	0802.09.09	0802.09.10	0802.09.11	0802.09.12
	0802.09.13	0802.09.14	0802.09.15	0802.09.16
	0802.09.17	0802.09.18	0802.09.19	0802.09.20
	0802.09.21	0802.09.22	0802.09.23	0802.09.24
	0802.09.25	0803.04.05	0803.04.06	0844.29.01
	0844.29.02	0844.29.03	0844.29.04	0844.29.05
	0844.29.06	0844.29.07	0844.29.08	0844.29.09
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	0844.29.14	0844.29.15	0844.29.16	0844.29.17
	0844.29.18	0844.29.19	0844.29.20	0844.29.21
	0844.29.22	0848.12.01	0848.12.02	0848.12.03
	0848.12.04	0848.12.05	0848.12.06	0848.12.07
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	0861.10.27	0861.10.28	0861.11.01	0861.11.02
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	0861.11.27	0861.11.28	0861.11.29	0861.11.30
	0861.11.31			
MCWP 3-16.3, Field Artillery Cannon Battery	0802.03.01	0802.03.02	0802.03.03	0802.03.04
	0802.03.05	0802.03.06	0802.03.07	0802.03.08
	0802.03.09	0802.03.12	0802.03.13	0802.03.14
	0802.03.15	0802.03.16	0802.03.17	0802.03.18
	0802.03.19	0802.03.20	0802.05.02	0802.05.03
	0802.05.04	0802.05.05	0802.05.08	0803.01.08
	0811.01.03	0811.01.04	0811.01.05	0811.01.06
	0811.01.09	0811.01.14	0811.01.18	0811.01.19
	0811.02.01	0811.02.03	0811.02.04	0811.02.05

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	0811.02.06	0811.02.07	0811.02.08	0811.02.09
	0811.02.13	0811.02.17	0811.02.18	0811.02.19
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	0811.03.17	0811.04.02	0811.04.03	0811.04.04
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	0811.04.17	0811.05.01	0811.05.02	0811.05.03
	0811.05.04	0811.05.06	0811.05.07	0811.05.08
	0811.06.20	0811.06.21	0811.06.22	0811.06.23
	0811.06.29	0844.12.32	0844.12.33	0844.12.34
	0844.12.35	0844.15.03	0844.15.11	0847.01.13
	0848.13.32	0848.13.33	0848.13.34	0848.13.35
	0848.16.08	0848.21.01	0848.21.02	0848.21.03
	0848.37.08	0848.37.09	0861.05.01	0861.05.02
	0861.05.03	0861.05.04		
MCWP 3-16.4, Field Artillery Manual Cannon Gunnery	0802.02.01	0802.02.02	0802.02.03	0802.02.04
	0802.02.07	0802.02.09	0802.02.10	0802.02.11
	0802.02.13	0802.03.02	0802.03.04	0802.03.20
	0811.04.09	0811.05.02	0811.05.04	0844.13.01
	0844.13.02	0844.13.03	0844.14.01	0844.15.01
	0844.15.02	0844.15.03	0844.15.04	0844.15.05
	0844.15.06	0844.15.07	0844.15.08	0844.15.09
	0844.15.10	0844.15.11	0844.16.01	0844.16.02
	0844.16.03	0844.16.04	0844.16.05	0844.16.06
	0844.16.07	0844.16.08	0844.17.01	0844.18.01
	0844.18.02	0844.18.03	0844.19.01	0844.19.02
	0844.19.03	0844.19.04	0844.19.05	0844.19.06
	0844.19.07	0844.19.08	0844.19.09	0844.19.10
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	0848.04.07	0848.05.01	0848.05.02	0848.05.03
	0848.05.04	0848.05.05	0848.05.06	0848.05.07
	0848.06.01	0848.06.02	0848.06.03	0848.06.04
	0848.06.05	0848.06.06	0848.11.02	0848.14.01
	0848.14.02	0848.14.03	0848.14.04	0848.14.05
	0848.15.01	0848.16.02	0848.16.03	0848.16.04
	0848.16.05	0848.16.06	0848.16.07	0848.16.08
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	0848.16.13	0848.16.14	0848.16.15	0848.16.16
	0848.17.01	0848.17.02	0848.18.01	0848.19.01
	0848.19.02	0848.19.03	0848.20.01	0848.20.02
	0848.20.03	0848.20.04	0848.20.05	0848.20.06
	0848.20.07	0848.21.01	0848.21.02	0848.21.03
	0848.22.01	0848.22.02	0848.25.01	0848.25.02
	0848.25.03	0848.26.03		
MCWP 3-16.5, Field Artillery Meteorology	0802.15.04	0803.02.01	0803.02.02	0803.02.03
	0803.02.04	0803.02.05	0803.02.06	0803.02.08
	0803.02.09	0847.01.01	0847.01.02	0847.01.03
	0847.01.05	0847.01.06	0847.01.07	0847.01.10
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	0847.01.19	0847.01.20	0847.01.21	0848.30.01
	0848.30.02	0848.30.03	0848.30.04	0848.30.05
	0848.30.06	0848.30.07	0848.30.08	0848.30.09
	0848.30.10	0848.30.11	0848.30.12	0848.30.13
	0848.30.14	0848.30.15	0848.30.16	
MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller	0802.01.01	0802.01.02	0802.01.03	0802.01.04
	0802.01.05	0802.01.06	0802.01.07	0802.01.08
	0802.01.09	0802.01.10	0802.01.11	0802.01.12
	0802.01.13	0802.01.14	0802.01.15	0802.01.16

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	0802.01.17	0802.01.18	0802.01.19	0802.01.20
	0802.01.21	0802.01.22	0802.01.23	0802.01.24
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	0802.01.29	0802.01.30	0802.01.31	0802.01.32
	0802.01.33	0802.01.34	0802.01.35	0802.03.02
	0802.04.04	0803.01.07	0811.01.01	0840.02.08
	0844.12.36	0844.12.37	0845.02.01	0845.02.02
	0845.02.03	0845.02.04	0845.02.05	0845.02.06
	0845.02.07	0845.02.08	0845.02.09	0845.02.10
	0845.02.11	0845.02.12	0845.02.13	0845.02.14
	0845.02.21	0845.02.22	0845.02.23	0845.02.25
	0845.02.26	0845.02.27	0845.02.28	0845.02.29
	0845.02.30	0845.04.01	0845.04.07	0845.04.08
	0845.04.09	0845.04.10	0848.13.36	0848.13.37
	0848.16.04	0861.01.01	0861.01.07	0861.01.08
	0861.01.09	0861.01.10	0861.01.15	0861.03.01
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	0861.03.24	0861.03.26	0861.03.27	0861.03.28
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	0861.03.33	0861.03.34	0861.03.35	0861.03.36
	0861.03.37	0861.03.38	0861.03.40	0861.03.41
	0861.03.42	0861.03.43	0861.03.44	0861.03.45
	0861.03.46	0861.03.47	0861.03.48	0861.03.49
	0861.03.50	0861.03.51	0861.03.52	0861.03.53
	0861.04.07	0861.05.02	0861.07.05	0861.07.06
	0861.07.07	0861.07.08		
MCWP 3-16.7, TTP's for Marine Artillery Survey	0844.12.07	0844.12.10	0844.12.47	0848.13.07
	0848.13.10	0848.13.47		
MCWP 3-16A, Targeting Process	0802.04.03	0802.04.06	0802.04.08	0803.03.07
	0803.04.01	0803.04.02	0803.04.03	0803.04.05
	0803.04.06	0840.02.04	0840.02.06	0840.02.08
	0840.02.12	0840.02.13	0861.04.05	0861.04.06
MCWP 3-42.1, Fire Support in MAGTF Operations	0802.04.01	0802.04.03	0802.04.05	0802.04.08
	0802.04.16	0840.01.02	0840.01.03	0840.01.04
	0840.01.06	0840.01.07	0840.01.08	0840.01.09
	0840.02.02	0840.02.03	0840.02.06	0840.02.13
	0840.02.17	0840.02.18	0840.02.19	0840.02.21
	0840.02.22	0840.02.23	0844.20.03	0844.21.02
	0844.21.03	0845.03.01	0845.03.02	0845.03.03
	0861.04.10	0861.04.12	0861.04.13	0861.04.14
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	0861.04.24	0861.04.25	0861.04.26	0861.04.28
	0861.04.29			
MCWP 5-1, Command and Staff Action	0802.04.07	0802.08.12	0840.01.09	0861.04.24
MSGR GPS-S MAINTENANCE MANUAL, MSGR GPS-S Maintenance Manual	0803.01.06			
NAVMC 2761, Catalog of Publications	0802.10.01	0811.05.09		
NAVSEA OP 4, Ammunition Afloat	0802.13.01	0811.05.17		
NAVSEA OP 5, VOL. 1, Ammunition and Explosives Ashore: Safety Regulations for Handling, Storing, Production, Renovation, and Shipping	0802.03.12	0802.03.22		

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NAVSEA SW020-AF-ABK-010 (ESTDC), Motor Vehicle Driver and Shipping Inspector's Manual for Ammunition, Explosives, and Related Hazardous Materials	0802.03.12	0802.03.22		
NAVSEA SW023-AH-WHM-010 (ESTDC), Handling Ammunition and Explosives with Industrial Materiel Handling Equipment (MHE)	0802.03.12	0802.03.22		
NWP 22-1, The Amphibious Task Force Plan	0840.01.09			
NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations	0802.04.01	0802.04.08	0802.06.01	0840.01.02
	0840.01.03	0840.01.04	0840.01.05	0840.01.06
	0840.01.07	0840.01.08	0840.01.09	0840.02.10
	0840.02.11	0840.02.13	0845.01.01	0845.02.14
	0845.02.19	0845.03.02	0845.03.03	0861.02.22
	0861.04.28	0861.04.29		
OH 4-1, Combat Service Support Operations	0802.13.01	0811.05.17		
OH 6-6, Marine Light Armor Employment	0802.04.01			
QSTAG 389, Standard Target Acquisition Met Message	0847.01.11			
RN AM**AD-A, Surface Equipment (Barometer, Psychrometer, and Anemometer)	0802.15.04	0847.01.07	0848.30.01	
RN AM33AE, Theodolite ML-474/GM	0847.01.08	0848.30.02		
RN AM33AQ, Inflation of Balloons	0847.01.05			
SL-3 10103A, SL-3 MMS Expendables	0803.02.06	0848.12.19	0861.11.20	
SL-3, EMT SUPPORT KIT(MET), EMT Support Kit (MET)	0848.30.16			
SL-3-00098A, Meteorological Set, Manual, AN/TMQ-7	0811.05.07			
SL-3-08972A, Meteorological Station, AN/TMQ-4A	0848.30.16			
SL-3-09702A, Marine Corps Stocklist For Plotting Equipment, Artillery Fire Direction	0848.01.11			
ST 6-2-30, Field Artillery Survey, Backup Computer System (BUCS), Revision 1	0844.12.10	0848.13.10		
ST 6-40-2, Battery Computer System BCS Job Aids	0802.02.13	0811.05.01	0844.01.01	0844.02.01
	0844.02.02	0844.02.03	0844.03.01	0844.03.02
	0844.03.03	0844.04.01	0844.05.01	0844.05.02
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	0844.06.07	0844.06.08	0844.06.09	0844.06.10
	0844.06.11	0844.06.12	0844.06.13	0848.01.04
	0848.02.01	0848.02.02	0848.02.03	0848.02.04
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	0848.05.05	0848.05.06	0848.05.07	0848.06.01
	0848.06.02	0848.06.03	0848.06.04	0848.06.05
	0848.06.06			

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ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application	0811.05.01	0844.07.01	0844.07.02	0844.08.01
	0844.08.02	0844.09.01	0844.10.01	0844.10.02
	0844.10.03	0844.10.04	0844.10.05	0844.10.06
	0844.11.01	0844.11.02	0848.07.01	0848.08.01
	0848.08.02	0848.09.01	0848.10.01	0848.10.02
	0848.10.03	0848.10.04	0848.10.05	0848.11.01
	0848.11.02			
ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook	0802.03.01	0802.03.03	0802.03.04	0802.03.05
	0802.03.06	0802.03.07	0802.03.08	0802.03.09
	0802.03.14	0802.03.16	0802.03.17	0802.03.18
	0802.03.19	0802.05.05	0811.01.06	0811.02.18
	0811.03.02	0811.03.17	0811.04.02	0811.04.03
	0811.04.04	0811.04.05	0811.04.06	0811.04.07
	0811.04.08	0811.04.10	0811.04.13	0811.04.14
	0811.04.15	0811.05.01	0811.05.02	0811.05.07
	0848.21.01	0848.21.02	0848.21.03	0861.05.01
	0861.05.02	0861.05.03	0861.05.04	
STANAG 3797, Minimum Qualifications for Forward Air Controller	0802.01.34	0861.03.42		
STANAG 4140, Standard Target Acquisition Met Message	0847.01.11			
TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software	0844.01.01	0844.02.01	0844.02.02	0844.02.03
	0844.03.01	0844.03.02	0844.03.03	0844.04.01
	0844.05.01	0844.05.02	0844.05.03	0844.05.04
	0844.06.01	0844.06.02	0844.06.03	0844.06.04
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	0844.06.12	0844.06.13	0848.01.11	0848.02.01
	0848.03.01	0848.03.03	0848.04.01	0848.04.02
	0848.04.03	0848.04.04	0848.04.05	0848.04.06
	0848.04.07	0848.05.01	0848.05.02	0848.05.03
	0848.05.04	0848.05.05	0848.05.06	0848.05.07
	0848.06.02	0848.06.03	0848.06.04	0848.06.05
	0848.06.06			
TB-11-7025-297-10, AFATDS Operators Notebook	0802.09.01	0802.09.02	0802.09.03	0802.09.04
	0802.09.05	0802.09.06	0802.09.07	0802.09.08
	0802.09.09	0802.09.10	0802.09.11	0802.09.12
	0802.09.13	0802.09.14	0802.09.15	0802.09.16
	0802.09.17	0802.09.18	0802.09.19	0802.09.20
	0802.09.21	0802.09.22	0802.09.23	0802.09.24
	0802.09.25	0844.29.01	0844.29.02	0844.29.03
	0844.29.04	0844.29.05	0844.29.06	0844.29.07
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	0844.29.12	0844.29.13	0844.29.14	0844.29.15
	0844.29.16	0844.29.17	0844.29.18	0844.29.19
	0844.29.20	0844.29.21	0844.29.22	0848.12.01
	0848.12.02	0848.12.03	0848.12.04	0848.12.05
	0848.12.06	0848.12.07	0848.12.08	0848.12.09
	0848.12.10	0848.12.11	0848.12.12	0848.12.13
	0848.12.14	0848.12.15	0848.12.16	0848.12.17
	0848.12.18	0848.12.19	0848.12.20	0848.12.21
	0848.12.22	0848.12.23	0848.12.24	0848.12.25
	0861.10.01	0861.10.01	0861.10.02	0861.10.03
	0861.10.04	0861.10.05	0861.10.06	0861.10.07
	0861.10.08	0861.10.09	0861.10.10	0861.10.11
	0861.10.12	0861.10.13	0861.10.14	0861.10.15
	0861.10.16	0861.10.17	0861.10.18	0861.10.19
	0861.10.20	0861.10.21	0861.10.22	0861.10.23
	0861.10.24	0861.10.25	0861.10.26	0861.10.27
	0861.10.28	0861.11.01	0861.11.02	0861.11.03
	0861.11.04	0861.11.05	0861.11.06	0861.11.07
	0861.11.08	0861.11.09	0861.11.10	0861.11.11

REFERENCES	TASK NUMBERS			
	0861.11.12	0861.11.13	0861.11.14	0861.11.15
	0861.11.16	0861.11.17	0861.11.18	0861.11.19
	0861.11.20	0861.11.21	0861.11.22	0861.11.23
	0861.11.24	0861.11.25	0861.11.26	0861.11.27
	0861.11.28	0861.11.29	0861.11.30	0861.11.31
TC 24-1, Tactical Communications Doctrine	0842.01.01			
TI-4733-15/21A, Survey Instrument Calibration Program	0803.02.02			
TM 07748A-12/1, Operator's Manual AN/PRC-104	0845.02.15	0861.02.15		
TM 07749A/07743A-12-1, Operator's Manual Radio Set AN/MRC-138	0845.02.16	0845.02.17	0861.02.16	0861.02.17
TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE	0802.01.02	0802.01.12	0845.02.26	0845.04.07
	0845.04.08	0845.04.09	0845.04.10	0861.01.07
	0861.01.08	0861.01.09	0861.01.10	0861.03.02
	0861.03.15	0861.03.16		
TM 08670A-10/1A, Operator's Manual, Machinegun, 7.62mm, M240	0802.05.07	0811.05.21		
TM 08670B-10/1, Supplement 1, M240G	0802.05.07	0811.05.21		
TM 08686A-13 & P/1, Operator and Organizational/Intermediate Maintenance With Repair Parts List and Component Inventory List for the Mount Machinegun MK 64, Mod 5	0811.01.01			
TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.	0803.02.02	0803.02.04	0803.02.09	0847.01.01
	0847.01.02	0847.01.03	0847.01.04	0847.01.06
	0847.01.15	0847.01.16	0847.01.17	0847.01.18
	0847.01.21	0847.01.22	0848.30.02	0848.30.04
	0848.30.06	0848.30.07	0848.30.08	0848.30.09
	0848.30.10	0848.30.11	0848.30.12	0848.30.13
	0848.30.14			
TM 11-2421, Barometers ML-331/TM, ML-332/TM, ML-333/TM, and Mercurial Barometers ML-330/FM and ML-330A/FM	0802.15.04	0847.01.07	0848.30.01	
TM 11-427, Barometers ML-102-B, ML-102-D, ML-102-E, ML-102-F, ML-102-G, and ML-316/TM	0802.15.04	0847.01.07	0848.30.01	
TM 11-5810-256-OP-2, Operating Procedures for Com Sec Equipment	0845.02.18	0861.02.18		
TM 11-5820-401-10-1, Radio Set, AN/VRC-12/43-49	0803.03.03			
TM 11-5820-477-12, Operator's and Organizational Maintenance Manual: Radio Set Control Groups AN/GRA-39, AN/GRA-39A, and AN/GRA-39B	0861.02.20			
TM 11-5820-890-10-1, SINCGARS Operator's Manual	0803.01.06	0842.01.01	0842.01.03	0842.02.04
	0842.05.03	0845.02.24	0848.28.03	0861.02.01
	0861.02.07	0861.02.08	0861.02.09	0861.02.10
	0861.02.11	0861.02.20		
TM 11-5820-890-10-6, SINCGARS ICOM Ground Radios Pocket Guide	0803.01.06			
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REFERENCES	TASK NUMBERS			
TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11	0802.14.01	0802.14.02	0802.14.03	0802.14.04
	0802.14.05	0802.14.06	0802.14.07	0802.14.08
	0802.14.09	0802.14.10	0844.12.23	0844.28.01
	0844.28.02	0844.28.03	0844.28.04	0844.28.05
	0844.28.06	0844.28.07	0844.28.08	0844.28.09
	0844.28.10	0845.04.13	0845.04.14	0847.01.13
	0848.13.23	0848.24.01	0848.24.02	0848.24.03
	0848.24.04	0848.24.05	0848.24.06	0848.24.07
	0848.24.08	0848.24.09	0848.24.10	0861.01.13
	0861.01.14			
TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36	0802.15.02	0802.15.03	0803.03.02	0803.03.03
	0842.02.01	0842.02.02	0842.02.03	0842.02.04
	0842.02.05	0842.03.01	0842.03.02	0842.03.03
	0842.03.04	0842.03.05	0842.03.06	0842.03.07
	0842.03.08	0842.03.09	0842.03.10	0842.03.11
	0842.03.12	0842.04.01	0842.04.02	0842.04.03
	0842.05.01	0848.27.02	0848.27.03	0848.27.04
	0848.28.01	0848.28.02	0848.28.03	0848.29.01
	0848.29.02	0848.29.03		
TM 11-5840-354-20-1, Organizational Maintenance Manual for Radar Set AN/TPQ-36	0848.28.03			
TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5	0802.01.11	0802.03.01	0811.05.01	0845.04.06
	0861.01.06	0861.03.12	0861.03.13	0861.03.14
TM 11-5895-1325-12, DCT Operations Manual	0802.01.10			
TM 11-5985-357-13, Ant Group OE-254/GRC	0842.02.04	0848.28.03	0861.02.19	
TM 11-6660-222-12, Meteorological Psychrometers	0848.30.05			
TM 11-6675-200-10, Operator's Manual: Theodolite ML-46C through ML-47R, ML-247, and ML-0247A, and Double Center Theodolite ML-474/Gm and ML-474A/GM	0847.01.08	0848.30.02	0848.30.04	
TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)	0848.31.01	0848.31.02	0848.31.03	0848.32.01
	0848.32.02	0848.32.03	0848.33.01	0848.33.02
	0848.33.03	0848.34.01	0848.34.02	0848.35.01
	0848.35.02	0848.36.01	0848.36.02	0848.36.03
	0848.36.04	0861.08.01	0861.08.02	0861.08.03
	0861.08.04	0861.08.05	0861.08.06	0861.08.07
	0861.08.08	0861.08.09	0861.08.10	0861.08.11
	0861.08.12	0861.08.13	0861.08.14	0861.08.15
	0861.09.01	0861.09.02	0861.09.03	0861.09.04
	0861.09.05	0861.09.06	0861.09.07	0861.09.08
	0861.09.09	0861.09.10	0861.09.11	
TM 11-7440-283-12-1-1, Operator's Manual, Computer Group, Gun Direction	0811.02.07	0811.02.08	0848.02.02	0848.02.03
	0848.02.04	0848.03.02	0848.03.04	0848.04.08
TM 11-7440-283-12-2, Computer Groups, Gun Direction	0811.01.19	0811.02.09		
TM 2320-10/6A, Truck Utility 1-1/4 Ton 4X4	0803.01.06	0803.03.03	0848.28.03	
TM 4700-15/1, Equipment Record Procedures	0802.03.21	0802.10.01	0803.01.06	0803.02.02
	0811.05.05	0811.05.09	0848.01.11	0848.30.04
TM 5-6115-585-12, Operation and Organizational Maintenance for Generator Set, Diesel Engine Driven, Tactical	0803.03.03	0848.28.03		

REFERENCES	TASK NUMBERS			
TM 5-6675-308-12, Operator's and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70	0803.01.06	0844.12.20	0844.12.21	0844.12.22
	0844.12.23	0844.12.24	0844.12.25	0844.12.26
	0844.12.27	0844.12.28	0848.13.20	0848.13.21
	0848.13.22	0848.13.23	0848.13.24	0848.13.25
	0848.13.26	0848.13.27	0848.13.28	
TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)	0803.01.02	0803.02.04	0803.03.04	0842.03.12
	0844.01.02	0847.01.20	0847.01.21	0848.01.12
	0848.30.06			
TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1	0811.06.01	0811.06.02	0811.06.03	0811.06.04
	0811.06.05	0811.06.06	0811.06.07	0811.06.08
	0811.06.09	0811.06.10	0811.06.11	0811.06.12
	0811.06.13	0811.06.15	0811.06.16	0811.06.17
	0811.06.18	0811.06.19	0811.06.21	0811.06.22
	0811.06.24	0811.06.25	0811.06.26	0811.06.27
	0811.06.28			
TM 9-1290-262-10, Operator's Manual for M2A2 Aiming Circle	0803.01.06	0811.04.11	0844.12.31	0844.12.32
	0844.12.33	0844.12.35	0848.13.31	0848.13.32
	0848.13.33	0848.13.35		
TM 9-1290-262-24, Organizational, Direct Support and General Support Maintenance Manual for Aiming Circle, M2 W/E and M2A2 W/E	0802.03.17	0811.04.02		
TM 9-2320-260-10, TRK 5-Ton 6X6 M809 Diesel	0811.03.07			
TM 9-2320-272-10, TRK 5-Ton 6X6 M939 Diesel	0811.03.07			
TM-09247A/09248A-24-1, Operator and Organizational Maintenance Manual for Generator Set	0842.05.02			
UM 4400-124, FMF SASSY Using Unit Procedures	0802.10.01	0811.05.09		
UM 4790-5, MIMMS (AIS) FMSS	0802.10.01	0811.05.09		
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TRAINING MATERIAL

1. General. Training materiel includes all training devices, simulators, aids, equipment, and materials [except ammunition, distance learning (DL) products, and performance support tools (PST)] required or recommended to properly train the task under the specified conditions and to the specified standard.

2. Format. The columns are as follows:

a. MATERIEL. This column summarizes all training materiel used in support of at least one ITS task in this OccFld.

b. TASK NUMBERS. A listing of all ITS tasks supported by the corresponding training support item in the Materiel column. An asterisk (*) precedes any task for which the training support item is mandatory for execution of the task.

MATERIEL	TASK NUMBERS		
Balloon, MET 100 (NSN: 6660-00-151-7772)	*0847.01.05	*0847.01.10	*0847.01.15
Balloon, MET 100 (NSN: 6660-00-151-7773)	*0847.01.05	*0847.01.10	*0847.01.15
Balloon, MET 1000 (NSN: 6660-00-809-5114)	*0847.01.05	*0847.01.10	*0847.01.15
Balloon, MET 300 (NSN: 6660-00-515-4214)	*0847.01.05	*0847.01.10	*0847.01.15
Barometer, Aneroid (NSN: 6660-01-316-3652)	*0847.01.05	*0847.01.10	*0847.01.15
Bottled Hydrogen	*0847.01.05	*0847.01.10	*0847.01.15
Hose, MET (NSN: 4730-00-263-3306)	*0847.01.05	*0847.01.10	*0847.01.15
Meter, Volume, HY (NSN: 6660-00-999-2661)	*0847.01.05	*0847.01.10	*0847.01.15
Nozzle, MET (NSN: 6660-00-818-6630)	*0847.01.05	*0847.01.10	*0847.01.15
Parachute, MET (NSN: 6666-00-408-4178)	*0847.01.05	*0847.01.15	
Psychrometer (NSN: 6660-00-223-5084)	*0847.01.05	*0847.01.10	*0847.01.15
Radiosonde, LORAN (NSN: 6660-01-340-7906)	*0847.01.05	*0847.01.15	
Radiosonde, Omega (NSN: 6660-01-353-8792)	*0847.01.05	*0847.01.15	
Radiosonde, RDF (NSN: 6660-01-353-8793)	*0847.01.05	*0847.01.15	
Sledge Hammer (NSN: 5120-00-224-4128)	*0847.01.05	*0847.01.10	*0847.01.15
Tool Kit, Electronic (NSN: 5180-00-408-1859)	*0847.01.05	*0847.01.15	
Twine, Fibrous (NSN: 5120-01-013-1767)	*0847.01.05	*0847.01.10	*0847.01.15

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3-IIE-2

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Annex II to
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Annex II to
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AMMUNITION, EXPLOSIVES, AND PYROTECHNICS

1. General. This table summarizes (by DODIC and Nomenclature) the ammunition, explosives, and/or pyrotechnics required to properly train all ITSS associated with this OccFld.

2. Format. Beneath each type of ammunition, the following information is contained in columns along with any pertinent comments:

a. TASK. A listing of all ITS tasks requiring that type of ammunition for proper execution.

b. INITIAL PROFICIENCY. The number of rounds required to support the initial proficiency training of the corresponding task.

c. PER ITERATION. The number of rounds required to support one iteration of the task.

d. ANNUAL SUSTAINMENT. The number of rounds required to maintain proficiency in the task on an annual basis. This is determined by dividing the "sustainment period" into 12 months and multiplying the result by the "per iteration" factor.

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
DODIC: B642 NOMENCLATURE: CTG 60MM, HE, W/MOF M734			
0861.03.38	11.000 EA	11.000 EA	66.000 EA
DODIC: C256 NOMENCLATURE: 81MM HE, M374 SERIES W/FZ PD			
0861.03.38	11.000 EA	11.000 EA	66.000 EA
DODIC: C445 NOMENCLATURE: CTG 105MM, HE, M1 W/O FUZE			
0811.06.08	1.000 EA	0.000 EA	0.000 EA
0811.06.20	4.000 EA	0.000 EA	0.000 EA
0811.06.29	4.000 EA	4.000 EA	24.000 EA
NOTE: C448 Cartridge, 105mm: HEP, HEP-T, M327 may be used in lieu of C445, HE. HE and HEP rounds to be used against "hard targets" during the conduct of direct fire, i.e. APCs, Bunkers, etc.			
DODIC: C449 NOMENCLATURE: 105MM M314A3 ILLUMINATION			
0811.06.08	1.000 EA	0.000 EA	0.000 EA
DODIC: C452 NOMENCLATURE: 105MM M84 HC, SMOKE, BE			
0811.06.08	1.000 EA	0.000 EA	0.000 EA
DODIC: C462 NOMENCLATURE: 105MM M444 ICM, HE			
0811.06.08	1.000 EA	0.000 EA	0.000 EA
DODIC: C463 NOMENCLATURE: 105MM M548 RAP, HE			
0811.06.08	1.000 EA	0.000 EA	0.000 EA
DODIC: C477 NOMENCLATURE: CTG 105MM, SMOKE, WP, M60A2			
0811.06.08	1.000 EA	0.000 EA	0.000 EA
DODIC: C479 NOMENCLATURE: CTG 105MM, SCR HC SMK W/O FZ			
0811.06.08	1.000 EA	0.000 EA	0.000 EA

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ENCLOSURE (3)

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
DODIC: C513 NOMENCLATURE: 105MM M546 APERS-T (BEEHIVE)			
0811.06.29	4.000 EA	4.000 EA	24.000 EA
NOTE: APERS to be used against soft-skinned targets during direct fire, i.e. Personnel, Trucks, etc.			
DODIC: D295 NOMENCLATURE: 5-INCH/54 HE FUZE CVT			
0802.01.31	0.000 EA	4.000 EA	8.000 EA
0845.02.09	4.000 EA	4.000 EA	24.000 EA
NOTE: May use D339, 5"/54 HE PD or D338, 5"/54 HE MT or D313, 5"/54 WP PD or D314, 5"/54 WP MT			
0861.03.45	8.000 EA	8.000 EA	48.000 EA
NOTE: May use D338, 5"/54 HE MT			
0861.03.48	4.000 EA	4.000 EA	24.000 EA
NOTE: May use D339, 5"/54 HE PD or D338, 5"/54 HE MT or D313, 5"/54 WP PD or D314, 5"/54 WP MT			
DODIC: D313 NOMENCLATURE: 5-INCH/54 WP FUZE PD			
0861.03.45	1.000 EA	1.000 EA	6.000 EA
NOTE: May use D353, 5"/54 ILLUM or D354, 5"/54 ILLUM			
DODIC: D314 NOMENCLATURE: 5-INCH/54 WP FUZE MT			
0845.02.06	1.000 EA	1.000 EA	6.000 EA
NOTE: May use D353, 5"/54 illum or D354, 5"/54 illum.			
DODIC: D326 NOMENCLATURE: 5-INCH/54 HE FUZE QUICK			
0802.01.31	0.000 EA	4.000 EA	8.000 EA
0845.02.30	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D295, 5"/54, HE CVT or D338, 5"/54, HE MT.			
0861.03.53	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D295, 5"/54, HE CVT or D338, 5"/54, HE MT.			
DODIC: D338 NOMENCLATURE: 5-INCH/54 HE FUZE MT			
0845.02.14	6.000 EA	6.000 EA	36.000 EA
DODIC: D339 NOMENCLATURE: 5-INCH/54 HE FUZE PD			
0845.02.05	5.000 EA	5.000 EA	30.000 EA
0845.02.06	8.000 EA	8.000 EA	48.000 EA
NOTE: May use D338, 5"/54 HE MT.			
0845.02.07	5.000 EA	5.000 EA	30.000 EA
0845.02.08	5.000 EA	5.000 EA	30.000 EA
0845.02.11	5.000 EA	5.000 EA	30.000 EA
0845.02.12	10.000 EA	10.000 EA	60.000 EA
0845.02.13	10.000 EA	10.000 EA	60.000 EA
0845.02.14	8.000 EA	8.000 EA	48.000 EA
0845.02.23	10.000 EA	10.000 EA	60.000 EA
0845.04.08	1.000 EA	1.000 EA	6.000 EA
0845.04.09	2.000 EA	2.000 EA	12.000 EA
0861.03.44	5.000 EA	5.000 EA	30.000 EA
0861.03.46	5.000 EA	5.000 EA	30.000 EA
0861.03.47	5.000 EA	5.000 EA	30.000 EA
0861.03.50	5.000 EA	5.000 EA	30.000 EA
0861.03.51	10.000 EA	10.000 EA	60.000 EA
0861.03.52	10.000 EA	10.000 EA	60.000 EA

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
DODIC: D353 NOMENCLATURE: 5-INCH/54 ILLUM			
0845.02.10	7.000 EA	7.000 EA	42.000 EA
NOTE: May use D354, 5"/54 ILLUM			
0845.02.30	7.000 EA	7.000 EA	42.000 EA
0861.03.49	7.000 EA	7.000 EA	42.000 EA
NOTE: May use D354, 5"/54 ILLUM			
0861.03.53	7.000 EA	7.000 EA	42.000 EA
DODIC: D501 NOMENCLATURE: 155MM M692 ADAM-L			
0802.01.18	12.000 EA	12.000 EA	72.000 EA
NOTE: May use D502 155mm M731 ADAM-S.			
0861.03.22	12.000 EA	12.000 EA	72.000 EA
NOTE: May use D502 155mm M731 ADAM-S.			
DODIC: D503 NOMENCLATURE: 155MM M718 RAAM-L			
0802.01.18	12.000 EA	12.000 EA	72.000 EA
NOTE: May use D509 155mm M741 RAAMS-S.			
0861.03.22	12.000 EA	12.000 EA	72.000 EA
NOTE: May use D509 155mm M741 RAAMS-S.			
DODIC: D505 NOMENCLATURE: PROJ 155MM, ILLUM, M485A2			
0802.01.16	4.000 EA	4.000 EA	24.000 EA
0802.01.17	7.000 EA	7.000 EA	42.000 EA
0802.01.35	2.000 EA	2.000 EA	12.000 EA
0811.01.07	1.000 EA	0.000 EA	0.000 EA
0811.01.24	1.000 EA	0.000 EA	0.000 EA
0861.03.20	4.000 EA	4.000 EA	24.000 EA
0861.03.21	7.000 EA	7.000 EA	42.000 EA
0861.03.43	2.000 EA	2.000 EA	12.000 EA
DODIC: D506 NOMENCLATURE: 155MM M116 SMK, HC			
0811.01.07	1.000 EA	0.000 EA	0.000 EA
0811.01.24	1.000 EA	0.000 EA	0.000 EA
DODIC: D510 NOMENCLATURE: PROJ 155MM, COPPERHEAD, M712			
0802.01.33	2.000 EA	2.000 EA	12.000 EA
0811.01.10	1.000 EA	0.000 EA	0.000 EA
NOTE: D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.			
0811.01.11	1.000 EA	0.000 EA	0.000 EA
NOTE: D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.			
0811.01.12	1.000 EA	0.000 EA	0.000 EA
NOTE: D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.			
0811.01.13	1.000 EA	0.000 EA	0.000 EA
NOTE: D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.			
0861.03.41	2.000 EA	2.000 EA	12.000 EA

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
DODIC: D528 NOMENCLATURE: PROJ 155MM, SMOKE, WP, M825			
0802.01.23	4.000 EA	4.000 EA	24.000 EA
0802.01.24	6.000 EA	6.000 EA	36.000 EA
0811.01.07	1.000 EA	0.000 EA	0.000 EA
0811.01.24	1.000 EA	0.000 EA	0.000 EA
0861.03.28	4.000 EA	4.000 EA	24.000 EA
0861.03.29	6.000 EA	6.000 EA	36.000 EA
DODIC: D532 NOMENCLATURE: CHG PROP 155MM, RED BAG, M203			
0811.01.08	1.000 EA	0.000 EA	0.000 EA
NOTE: 155mm M203, red bag, with zone 8 super, used only in the M198 towed howitzer at this time.			
0811.01.24	1.000 EA	0.000 EA	0.000 EA
DODIC: D533 NOMENCLATURE: CHG PROP 155MM, RED BAG, M119			
0811.01.08	1.000 EA	0.000 EA	0.000 EA
NOTE: 155mm M119/M119A1, white bag, with zone 8 only.			
0811.01.24	1.000 EA	0.000 EA	0.000 EA
DODIC: D534 NOMENCLATURE: 155MM M119/119A1, WB, W/ZONE 8			
0811.01.08	1.000 EA	0.000 EA	0.000 EA
0811.01.24	1.000 EA	0.000 EA	0.000 EA
DODIC: D540 NOMENCLATURE: CHG PROP 155MM, GREEN BAG, M3			
0802.01.09	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.10	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.11	3.000 EA	3.000 EA	18.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.12	3.000 EA	3.000 EA	18.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.13	3.000 EA	3.000 EA	18.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.14	4.000 EA	4.000 EA	24.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.15	4.000 EA	4.000 EA	24.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.16	4.000 EA	4.000 EA	24.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.17	12.000 EA	12.000 EA	72.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.18	27.000 EA	27.000 EA	162.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.19	7.000 EA	7.000 EA	42.000 EA
NOTE: may use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.20	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
0802.01.21	0.000 EA	10.000 EA	60.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.22	32.000 EA	32.000 EA	192.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.23	5.000 EA	5.000 EA	30.000 EA
NOTE: may use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.24	15.000 EA	15.000 EA	90.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.25	10.000 EA	10.000 EA	60.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.26	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.27	13.000 EA	13.000 EA	78.000 EA
NOTE: May use D54 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.28	8.000 EA	8.000 EA	48.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.29	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.30	0.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.32	0.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.33	2.000 EA	2.000 EA	12.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0802.01.35	8.000 EA	8.000 EA	48.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0811.01.08	1.000 EA	0.000 EA	0.000 EA
0811.01.24	1.000 EA	0.000 EA	0.000 EA
0842.03.06	1.000 EA	0.000 EA	0.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0842.03.10	2.000 EA	2.000 EA	8.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7			
0842.03.11	8.000 EA	8.000 EA	32.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7			
0844.12.36	5.000 EA	5.000 EA	10.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0844.12.37	4.000 EA	4.000 EA	8.000 EA
NOTE: May use D541 155 M4 series, white bag, with zones 3 through 7.			
0861.01.08	1.000 EA	1.000 EA	6.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7			
0861.01.09	2.000 EA	2.000 EA	12.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7			
0861.03.11	5.000 EA	5.000 EA	30.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.			
0861.03.13	2.000 EA	2.000 EA	12.000 EA
NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7			

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
0861.03.16 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	2.000 EA	2.000 EA	12.000 EA
0861.03.17 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7	4.000 EA	4.000 EA	24.000 EA
0861.03.18 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
0861.03.19 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
0861.03.20 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
0861.03.21 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	12.000 EA	12.000 EA	72.000 EA
0861.03.22 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	27.000 EA	27.000 EA	162.000 EA
0861.03.23 NOTE: may use D541 155mm M4 series, white bag, with zones 3 through 7.	7.000 EA	7.000 EA	42.000 EA
0861.03.24 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
0861.03.26 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	10.000 EA	60.000 EA
0861.03.27 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	32.000 EA	32.000 EA	192.000 EA
0861.03.28 NOTE: may use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
0861.03.29 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	15.000 EA	15.000 EA	90.000 EA
0861.03.30 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	10.000 EA	10.000 EA	60.000 EA
0861.03.31 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
0861.03.33 NOTE: May use D54 155mm M4 series, white bag, with zones 3 through 7.	13.000 EA	13.000 EA	78.000 EA
0861.03.34 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	8.000 EA	8.000 EA	48.000 EA
0861.03.35 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
0861.03.36 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	5.000 EA	30.000 EA
0861.03.37 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
0861.03.40 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	5.000 EA	30.000 EA
0861.03.41 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	2.000 EA	2.000 EA	12.000 EA
0861.03.43 NOTE: May use D541 155mm M4 series, white bag, with zones 3 through 7.	8.000 EA	8.000 EA	48.000 EA

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
DODIC: D541 NOMENCLATURE: CHG PROP 155MM, WHITE BAG, M4			
0811.01.08	1.000 EA	0.000 EA	0.000 EA
0811.01.24	1.000 EA	0.000 EA	0.000 EA
0811.03.12	8.000 EA	8.000 EA	16.000 EA
0811.03.14	4.000 EA	4.000 EA	8.000 EA
DODIC: D544 NOMENCLATURE: PROJ 155MM, HE, M107			
0802.01.09	5.000 EA	5.000 EA	30.000 EA
0802.01.10	5.000 EA	5.000 EA	30.000 EA
0802.01.11	3.000 EA	3.000 EA	18.000 EA
0802.01.12	3.000 EA	3.000 EA	18.000 EA
0802.01.13	3.000 EA	3.000 EA	18.000 EA
0802.01.14	4.000 EA	4.000 EA	24.000 EA
0802.01.15	4.000 EA	4.000 EA	24.000 EA
0802.01.17	5.000 EA	5.000 EA	30.000 EA
0802.01.18	3.000 EA	3.000 EA	18.000 EA
0802.01.19	3.000 EA	3.000 EA	18.000 EA
0802.01.20	5.000 EA	5.000 EA	30.000 EA
0802.01.21	0.000 EA	10.000 EA	60.000 EA
0802.01.22	32.000 EA	32.000 EA	192.000 EA
0802.01.24	3.000 EA	3.000 EA	18.000 EA
0802.01.25	10.000 EA	10.000 EA	60.000 EA
0802.01.26	5.000 EA	5.000 EA	30.000 EA
0802.01.27	13.000 EA	13.000 EA	78.000 EA
0802.01.28	8.000 EA	8.000 EA	48.000 EA
0802.01.29	5.000 EA	5.000 EA	30.000 EA
0802.01.30	0.000 EA	5.000 EA	30.000 EA
0802.01.32	0.000 EA	5.000 EA	30.000 EA
0802.01.35	4.000 EA	4.000 EA	24.000 EA
0811.01.07	1.000 EA	0.000 EA	0.000 EA
0811.01.24	1.000 EA	0.000 EA	0.000 EA
0811.03.12	8.000 EA	8.000 EA	16.000 EA
0811.03.14	4.000 EA	4.000 EA	8.000 EA
0842.03.06	1.000 EA	0.000 EA	0.000 EA
0842.03.10	2.000 EA	2.000 EA	8.000 EA
0842.03.11	8.000 EA	8.000 EA	32.000 EA
0844.12.36	5.000 EA	5.000 EA	10.000 EA
0844.12.37	4.000 EA	4.000 EA	8.000 EA
0861.01.08	1.000 EA	1.000 EA	6.000 EA
0861.01.09	2.000 EA	2.000 EA	12.000 EA
0861.03.11	5.000 EA	5.000 EA	30.000 EA
0861.03.13	2.000 EA	2.000 EA	12.000 EA
0861.03.16	2.000 EA	2.000 EA	12.000 EA
0861.03.17	4.000 EA	4.000 EA	24.000 EA
0861.03.18	4.000 EA	4.000 EA	24.000 EA
0861.03.19	4.000 EA	4.000 EA	24.000 EA
0861.03.21	5.000 EA	5.000 EA	30.000 EA
0861.03.22	3.000 EA	3.000 EA	18.000 EA
0861.03.23	3.000 EA	3.000 EA	18.000 EA
0861.03.24	5.000 EA	5.000 EA	30.000 EA
0861.03.26	0.000 EA	10.000 EA	60.000 EA
0861.03.27	32.000 EA	32.000 EA	192.000 EA
0861.03.29	3.000 EA	3.000 EA	18.000 EA
0861.03.30	10.000 EA	10.000 EA	60.000 EA
0861.03.31	5.000 EA	5.000 EA	30.000 EA
0861.03.33	13.000 EA	13.000 EA	78.000 EA
0861.03.34	8.000 EA	8.000 EA	48.000 EA
0861.03.35	5.000 EA	5.000 EA	30.000 EA
0861.03.36	0.000 EA	5.000 EA	30.000 EA
0861.03.37	4.000 EA	4.000 EA	24.000 EA
0861.03.40	0.000 EA	5.000 EA	30.000 EA
0861.03.43	4.000 EA	4.000 EA	24.000 EA

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
DODIC: D550 NOMENCLATURE: PROJ 155MM, SMOKE, WP, M110A1			
0802.01.23	1.000 EA	1.000 EA	6.000 EA
0802.01.24	6.000 EA	6.000 EA	36.000 EA
0802.01.35	2.000 EA	2.000 EA	12.000 EA
0811.01.07	1.000 EA	0.000 EA	0.000 EA
0861.03.28	1.000 EA	1.000 EA	6.000 EA
0861.03.29	6.000 EA	6.000 EA	36.000 EA
0861.03.43	2.000 EA	2.000 EA	12.000 EA
DODIC: D563 NOMENCLATURE: PROJ 155MM, HE DP ICM, M483A1			
0802.01.19	4.000 EA	4.000 EA	24.000 EA
0861.03.23	4.000 EA	4.000 EA	24.000 EA
DODIC: D579 NOMENCLATURE: PROJ 155MM, HE RA, M549A1			
0811.01.07	1.000 EA	0.000 EA	0.000 EA
DODIC: G940 NOMENCLATURE: GRENADE, HAND, SMOKE, GREEN			
0811.02.13	2.000 EA	2.000 EA	12.000 EA
DODIC: G945 NOMENCLATURE: GRENADE, HAND, SMOKE, YELLOW			
0811.02.13	2.000 EA	2.000 EA	12.000 EA
DODIC: N248 NOMENCLATURE: FUZE M565 MT			
0811.06.08	1.000 EA	0.000 EA	0.000 EA
DODIC: N278 NOMENCLATURE: FUZE M563 MTSQ			
0811.06.29	4.000 EA	4.000 EA	24.000 EA
NOTE: To be used with the APERS round only.			
DODIC: N285 NOMENCLATURE: FUZE M577 MT			
0802.01.16	4.000 EA	4.000 EA	24.000 EA
NOTE: May use N248 MT M565.			
0802.01.17	7.000 EA	7.000 EA	42.000 EA
NOTE: May use N248 MT M565.			
0802.01.18	24.000 EA	24.000 EA	144.000 EA
0802.01.19	4.000 EA	4.000 EA	24.000 EA
0802.01.23	4.000 EA	4.000 EA	24.000 EA
0802.01.24	6.000 EA	6.000 EA	36.000 EA
0811.06.08	1.000 EA	0.000 EA	0.000 EA
0861.03.20	4.000 EA	4.000 EA	24.000 EA
NOTE: May use N248 MT M565.			
0861.03.21	7.000 EA	7.000 EA	42.000 EA
NOTE: May use N248 MT M565.			
0861.03.22	24.000 EA	24.000 EA	144.000 EA
0861.03.23	4.000 EA	4.000 EA	24.000 EA
0861.03.28	4.000 EA	4.000 EA	24.000 EA
0861.03.29	6.000 EA	6.000 EA	36.000 EA
DODIC: N286 NOMENCLATURE: FUZE M582 MTSQ			
0802.01.27	6.000 EA	6.000 EA	36.000 EA
NOTE: May use N278 MTSQ M564.			
0802.01.29	2.000 EA	2.000 EA	12.000 EA
NOTE: May use N278 MTSQ M564.			

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
0802.01.30 NOTE: May use N278 MTSQ M564.	0.000 EA	2.000 EA	12.000 EA
0811.03.12	4.000 EA	4.000 EA	8.000 EA
0861.03.33 NOTE: May use N278 MTSQ M564.	6.000 EA	6.000 EA	36.000 EA
0861.03.35 NOTE: May use N278 MTSQ M564.	2.000 EA	2.000 EA	12.000 EA
0861.03.36 NOTE: May use N278 MTSQ M564.	0.000 EA	2.000 EA	12.000 EA
DODIC: N289 NOMENCLATURE: FUZE, ELECTRONIC TIME			
0811.01.07 NOTE: May use N248, M565 MT or N285, M577 MTSQ	1.000 EA	0.000 EA	0.000 EA
0811.01.24 NOTE: May use N248, M565 MT or N285, M577 MTSQ.	1.000 EA	0.000 EA	0.000 EA
DODIC: N290 NOMENCLATURE: FUZE, ELECTRONIC TIME			
0802.01.28 NOTE: Used only for high-burst	8.000 EA	8.000 EA	48.000 EA
0811.01.07 NOTE: May use N278, M564 MTSQ or N286, M582 MTSQ	1.000 EA	0.000 EA	0.000 EA
0811.01.24 NOTE: May use N278, M564 MTSQ or N286, M582 MTSQ.	1.000 EA	0.000 EA	0.000 EA
0861.03.34 NOTE: Used only for high-burst	8.000 EA	8.000 EA	48.000 EA
0861.03.37 NOTE: May use N278, M564 MTSQ or N286, M582 MTSQ	2.000 EA	2.000 EA	12.000 EA
DODIC: N291 NOMENCLATURE: FUZE, PROXIMITY (VT)			
0811.01.07 NOTE: May use N463, M728 VT or N464, M732 VT	1.000 EA	0.000 EA	0.000 EA
0811.01.24 NOTE: May use N463, M728 VT or N464, M732 VT.	1.000 EA	0.000 EA	0.000 EA
DODIC: N340 NOMENCLATURE: FUZE, PD, M739			
0802.01.09 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0802.01.10 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0802.01.11 NOTE: May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
0802.01.12 NOTE: May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
0802.01.13 NOTE: May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
0802.01.14 NOTE: May use N335 M557 PD SQ/D or N464 VT M732 or N463 VT M728	4.000 EA	4.000 EA	24.000 EA
0802.01.15 NOTE: May use N335 M557 PD SQ/D.	4.000 EA	4.000 EA	24.000 EA

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
0802.01.17 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0802.01.18	3.000 EA	3.000 EA	18.000 EA
0802.01.19 NOTE: May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
0802.01.20 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0802.01.21 NOTE: May use N335 M557 PD SQ/D.	0.000 EA	10.000 EA	60.000 EA
0802.01.22 NOTE: May use N335 M557 PD SQ/D.	32.000 EA	32.000 EA	192.000 EA
0802.01.23 NOTE: May use N335 M557 PD SQ/D.	1.000 EA	1.000 EA	6.000 EA
0802.01.24 NOTE: May use N335 M557 PD SQ/D.	9.000 EA	9.000 EA	54.000 EA
0802.01.25 NOTE: May use N335 M557 PD SQ/D.	10.000 EA	10.000 EA	60.000 EA
0802.01.26 NOTE: May us N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0802.01.27 NOTE: May use N335 M557 PD SQ/D.	7.000 EA	7.000 EA	42.000 EA
0802.01.28 NOTE: May use N335 M557 PD or N278 MTSQ M564 or N286 MTSQ M582.	8.000 EA	8.000 EA	48.000 EA
0802.01.29 NOTE: May use N335 M557 PD.	3.000 EA	3.000 EA	18.000 EA
0802.01.30 NOTE: May use N335 M557 PD.	0.000 EA	3.000 EA	18.000 EA
0802.01.32 NOTE: May use N335 M557 PD.	0.000 EA	5.000 EA	30.000 EA
0802.01.35 NOTE: May use N335 M557 PD.	6.000 EA	6.000 EA	36.000 EA
0811.01.07 NOTE: May use N335, M557 PD SQ/D	1.000 EA	0.000 EA	0.000 EA
0811.01.24 NOTE: May use N335, M557 PD SQ/D.	1.000 EA	0.000 EA	0.000 EA
0811.03.12 NOTE: May use N335, M557 PD SQ/D	4.000 EA	4.000 EA	8.000 EA
0811.03.14 NOTE: May use N286, M582 MTSQ	4.000 EA	4.000 EA	8.000 EA
0811.06.08	1.000 EA	0.000 EA	0.000 EA
0811.06.29	4.000 EA	4.000 EA	
24.000 EA NOTE: N340, PD Fuze will be required for the C445 HE projectile to make a complete round of artillery ammunition. However, the N340 PD fuze will not be required when using the HEP / HEP-T projectile. The HEP / HEP-T projectile is already fuzed and packaged as a complete round of artillery ammunition.			
0842.03.06 NOTE: May use N335, M577 PD SQ/D	1.000 EA	0.000 EA	0.000 EA

TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
0842.03.10 NOTE: May use N335, M557 PD SQ/D	2.000 EA	2.000 EA	8.000 EA
0842.03.11 NOTE: May use N335, M557 PD SQ/D; or N248 MT M565	8.000 EA	8.000 EA	32.000 EA
0844.12.36 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	10.000 EA
0844.12.37 NOTE: May use N335 M557 PD SQ/D or N464 VT M732 or N463 VT M728.	4.000 EA	4.000 EA	8.000 EA
0861.01.08 NOTE: May use N335, M557 PD SQ/D	1.000 EA	1.000 EA	6.000 EA
0861.01.09 NOTE: May use N335, M557 PD SQ/D	2.000 EA	2.000 EA	12.000 EA
0861.03.11 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0861.03.13 NOTE: May use N335, M557 PD SQ/D.	2.000 EA	2.000 EA	12.000 EA
0861.03.16 NOTE: May use N335, M557 PD SQ/D.	2.000 EA	2.000 EA	12.000 EA
0861.03.17 NOTE: May use N335, M557 PD SQ/D	4.000 EA	4.000 EA	24.000 EA
0861.03.18 NOTE: May use N335 M557 PD SQ/D or N464 VT M732 or N463 VT M728	4.000 EA	4.000 EA	24.000 EA
0861.03.19 NOTE: May use N335 M557 PD SQ/D.	4.000 EA	4.000 EA	24.000 EA
0861.03.21 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0861.03.22	3.000 EA	3.000 EA	18.000 EA
0861.03.23 NOTE: May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
0861.03.24 NOTE: May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0861.03.26 NOTE: May use N335 M557 PD SQ/D.	0.000 EA	10.000 EA	60.000 EA
0861.03.27 NOTE: May use N335 M557 PD SQ/D.	32.000 EA	32.000 EA	192.000 EA
0861.03.28 NOTE: May use N335 M557 PD SQ/D.	1.000 EA	1.000 EA	6.000 EA
0861.03.29 NOTE: May use N335 M557 PD SQ/D.	9.000 EA	9.000 EA	54.000 EA
0861.03.30 NOTE: May use N335 M557 PD SQ/D.	10.000 EA	10.000 EA	60.000 EA
0861.03.31 NOTE: May us N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
0861.03.33 NOTE: May use N335 M557 PD SQ/D.	7.000 EA	7.000 EA	42.000 EA

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TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
0861.03.34	8.000 EA	8.000 EA	48.000 EA
NOTE: May use N335 M557 PD or N278 MTSQ M564 or N286 MTSQ M582.			
0861.03.35	3.000 EA	3.000 EA	18.000 EA
NOTE: May use N335 M557 PD.			
0861.03.36	0.000 EA	3.000 EA	18.000 EA
NOTE: May use N335 M557 PD.			
0861.03.37	2.000 EA	2.000 EA	12.000 EA
NOTE: May use N335, M557 PD SQ/D			
0861.03.40	0.000 EA	5.000 EA	30.000 EA
NOTE: May use N335 M557 PD.			
0861.03.43	6.000 EA	6.000 EA	36.000 EA
NOTE: May use N335 M557 PD.			
DODIC: N523 NOMENCLATURE: PRIMER, PERCUSSION, M82			
0802.01.09	5.000 EA	5.000 EA	30.000 EA
0802.01.10	5.000 EA	5.000 EA	30.000 EA
0802.01.11	3.000 EA	3.000 EA	18.000 EA
0802.01.12	3.000 EA	3.000 EA	18.000 EA
0802.01.13	3.000 EA	3.000 EA	18.000 EA
0802.01.14	4.000 EA	4.000 EA	24.000 EA
0802.01.15	4.000 EA	4.000 EA	24.000 EA
0802.01.16	4.000 EA	4.000 EA	24.000 EA
0802.01.17	12.000 EA	12.000 EA	72.000 EA
0802.01.18	27.000 EA	27.000 EA	162.000 EA
0802.01.19	7.000 EA	7.000 EA	42.000 EA
0802.01.20	5.000 EA	5.000 EA	30.000 EA
0802.01.21	0.000 EA	10.000 EA	60.000 EA
0802.01.22	32.000 EA	32.000 EA	192.000 EA
0802.01.23	5.000 EA	5.000 EA	30.000 EA
0802.01.24	15.000 EA	15.000 EA	90.000 EA
0802.01.25	10.000 EA	10.000 EA	60.000 EA
0802.01.26	5.000 EA	5.000 EA	30.000 EA
0802.01.27	13.000 EA	13.000 EA	78.000 EA
0802.01.28	8.000 EA	8.000 EA	48.000 EA
0802.01.29	5.000 EA	5.000 EA	30.000 EA
0802.01.30	0.000 EA	5.000 EA	30.000 EA
0802.01.32	0.000 EA	5.000 EA	30.000 EA
0802.01.33	2.000 EA	2.000 EA	12.000 EA
0802.01.35	8.000 EA	8.000 EA	48.000 EA
0811.03.12	8.000 EA	8.000 EA	16.000 EA
0811.03.14	4.000 EA	4.000 EA	8.000 EA
0842.03.06	1.000 EA	0.000 EA	0.000 EA
0842.03.10	2.000 EA	2.000 EA	8.000 EA
0842.03.11	8.000 EA	8.000 EA	32.000 EA
0844.12.36	5.000 EA	5.000 EA	10.000 EA
0844.12.37	4.000 EA	4.000 EA	8.000 EA
0861.01.08	1.000 EA	1.000 EA	6.000 EA
0861.01.09	2.000 EA	2.000 EA	12.000 EA
0861.03.11	5.000 EA	5.000 EA	30.000 EA
0861.03.13	2.000 EA	2.000 EA	12.000 EA
0861.03.16	2.000 EA	2.000 EA	12.000 EA
0861.03.17	4.000 EA	4.000 EA	24.000 EA
0861.03.18	4.000 EA	4.000 EA	24.000 EA
0861.03.19	4.000 EA	4.000 EA	24.000 EA
0861.03.20	4.000 EA	4.000 EA	24.000 EA
0861.03.21	12.000 EA	12.000 EA	72.000 EA
0861.03.22	27.000 EA	27.000 EA	162.000 EA
0861.03.23	7.000 EA	7.000 EA	42.000 EA
0861.03.24	5.000 EA	5.000 EA	30.000 EA
0861.03.26	0.000 EA	10.000 EA	60.000 EA
0861.03.27	32.000 EA	32.000 EA	192.000 EA
0861.03.28	5.000 EA	5.000 EA	30.000 EA

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TASK	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
0861.03.29	15.000 EA	15.000 EA	90.000 EA
0861.03.30	10.000 EA	10.000 EA	60.000 EA
0861.03.31	5.000 EA	5.000 EA	30.000 EA
0861.03.33	13.000 EA	13.000 EA	78.000 EA
0861.03.34	8.000 EA	8.000 EA	48.000 EA
0861.03.35	5.000 EA	5.000 EA	30.000 EA
0861.03.36	0.000 EA	5.000 EA	30.000 EA
0861.03.37	4.000 EA	4.000 EA	24.000 EA
0861.03.40	0.000 EA	5.000 EA	30.000 EA
0861.03.41	2.000 EA	2.000 EA	12.000 EA
0861.03.43	8.000 EA	8.000 EA	48.000 EA
DODIC: N659 NOMENCLATURE: FUZE CP MK399-1			
0811.06.20	4.000 EA	0.000 EA	0.000 EA

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DISTANCE LEARNING PRODUCTS

1. General. This appendix includes a list of all currently available or planned distance learning (DL) products, including Marine Corps Institute (MCI) publications, designed to provide training related to any task in this OccFld.
2. Format. The columns are as follows:
- a. DISTANCE LEARNING PRODUCTS. This column summarizes all DL products assigned to at least one ITS task in this OccFld.
- b. TASK NUMBERS. A listing of all ITS tasks associated with the corresponding DL product.

DISTANCE LEARNING PRODUCTS	TASK NUMBERS			
028, Introduction to Combat Intelligence	0802.01.01	0802.01.05	0802.03.18	0802.03.19
	0803.01.04	0803.01.08	0803.04.01	0811.04.13
	0811.04.14	0811.04.15	0811.04.17	0811.05.06
	0811.05.19	0844.12.33	0844.12.34	0844.12.47
	0844.21.01	0844.21.02	0844.21.03	0844.21.04
	0844.21.05	0845.01.01	0845.02.25	0848.13.47
	0848.29.01	0848.29.02	0848.29.03	0861.01.15
	0861.02.24	0861.02.25	0861.03.01	0861.03.06
	0861.04.07	0861.04.10	0861.04.12	0861.04.23
	0861.04.25	0861.04.26	0861.04.27	0861.05.01
	0861.05.02	0861.05.03	0861.05.04	0861.05.05
	0861.07.09	0861.07.11		
0321, The M240G Machinegunner	0802.05.07	0811.02.13	0811.04.01	0811.04.12
	0811.04.17	0811.05.06	0811.05.19	0811.05.21
	0861.04.26	0861.04.27		
0322, The 81mm Mortar Crewman	0848.37.05	0848.37.06	0861.04.25	0861.04.26
	0861.04.27			
0331, 81mm Mortar NCO	0848.37.01	0848.37.02	0848.37.03	0848.37.04
	0848.37.05	0848.37.06	0848.37.07	0848.37.09
	0848.37.10	0861.04.25	0861.04.26	0861.04.27
0332, Reconnaissance Marine	0802.01.01	0802.01.04	0802.01.05	0802.05.03
	0803.01.04	0811.04.12	0844.12.47	0845.01.01
	0845.02.25	0848.13.47	0861.01.15	0861.03.01
	0861.03.06	0861.04.10		
0335, Infantry Patrolling	0802.01.01	0802.05.02	0802.05.03	0811.04.12
	0811.04.17	0811.05.06	0811.05.19	0845.01.01
	0845.02.25	0861.01.15	0861.03.01	
0338, The LAV Crewman	0848.37.05	0848.37.06		
034, Landmine Warfare, Demolitions, and Breaching Operations	0802.05.02	0802.05.03	0811.04.12	0811.04.17
	0811.05.06	0811.05.19	0861.04.26	0861.04.27
0365, Anti-Armor Operations	0802.05.02	0802.05.03	0811.02.13	0811.04.12
	0811.04.17	0811.05.06	0811.05.19	0861.04.26
	0861.04.27			
0368, The Heavy Machinegun Crewman	0802.05.02	0802.05.07	0811.01.01	0811.02.13
	0811.04.01	0811.04.12	0811.04.17	0811.05.06
	0811.05.19	0811.05.21	0861.04.26	0861.04.27
0370, The Marine Rifleman: Combat Skills	0802.05.02	0811.02.13	0811.04.12	0811.04.17
	0811.05.06	0811.05.19		
0372, The Marine Rifleman: Weapons	0802.05.02	0802.05.07	0811.02.13	0811.04.12
	0811.04.17	0811.05.06	0811.05.19	

DISTANCE LEARNING PRODUCTS	TASK NUMBERS			
0380, Infantry Squad Leader: Combat Leadership	0802.05.02	0811.02.13	0811.04.12	0811.04.16
	0811.04.17	0811.05.06	0811.05.07	0811.05.08
	0811.05.19			
0381, Land Navigation	0802.01.01	0802.01.06	0802.01.07	0802.03.10
	0802.05.03	0802.05.06	0811.01.02	0811.04.12
	0811.05.07	0811.05.08	0811.05.19	0845.01.01
	0845.02.01	0845.02.02	0845.02.25	0845.02.28
	0845.04.01	0845.04.02	0845.04.03	0845.04.04
	0845.04.05	0845.04.11	0845.04.12	0845.04.13
	0845.04.14	0861.01.01	0861.01.02	0861.01.03
	0861.01.04	0861.01.05	0861.01.11	0861.01.12
	0861.03.01	0861.03.04	0861.03.07	0861.03.08
0382, Infantry Squad Leader: Weapons and Fire Support	0802.05.02	0802.05.07	0811.02.13	0811.04.12
	0811.04.17	0811.05.06	0811.05.19	0848.37.05
	0848.37.06	0861.04.25	0861.04.26	0861.04.27
0385, Land Navigation (Web)	0802.01.01	0802.01.06	0802.01.07	0802.03.10
	0802.05.03	0802.05.06	0811.01.02	0811.04.12
	0811.05.07	0811.05.08	0811.05.19	0845.01.01
	0845.02.01	0845.02.02	0845.02.25	0845.02.28
	0845.04.01	0845.04.02	0845.04.03	0845.04.04
	0845.04.05	0845.04.11	0845.04.12	0845.04.13
	0845.04.14	0861.01.01	0861.01.02	0861.01.03
	0861.01.04	0861.01.05	0861.01.11	0861.01.12
	0861.03.01	0861.03.04	0861.03.07	0861.03.08
0410, MIMMS (AIS)	0802.10.01	0802.11.01	0803.01.06	0811.01.25
	0811.03.07	0811.03.18	0811.03.20	0811.05.09
	0811.05.19	0811.06.09	0811.06.10	0842.05.01
	0842.05.02	0842.05.03	0844.12.06	0844.12.28
	0844.12.35	0845.02.20	0847.01.22	0848.01.11
	0848.13.06	0848.13.28	0848.28.03	0848.30.04
	0861.02.23	0861.03.14		
0414, Ground Maintenance Management Procedures for Supervisors	0802.03.21	0802.10.01	0802.11.01	0803.01.04
	0803.01.06	0811.03.07	0811.03.18	0811.03.20
	0811.05.05	0811.05.09	0811.05.19	0811.06.10
	0845.02.20	0848.01.11	0848.13.06	0848.13.28
	0848.28.03	0848.30.04		
0416, The Marine Corps Publications and Directives System	0802.10.01	0803.01.06	0811.03.07	0811.03.18
	0811.03.20	0811.05.05	0811.05.09	0811.05.19
	0811.06.09	0811.06.10	0842.05.01	0842.05.02
	0842.05.03	0844.12.06	0844.12.28	0844.12.35
	0845.02.20	0847.01.22	0848.01.11	0848.13.06
	0848.13.28	0848.28.03	0848.30.04	0861.02.23
	0861.03.14			
045, The Logistics/Embarkation Specialist	0802.11.01	0802.13.01	0811.05.10	0811.05.17
	0811.05.19	0847.01.19	0848.30.06	
047, Introduction to Amphibious Embarkation	0802.11.01	0802.13.01	0811.05.17	0811.05.19
	0847.01.19	0848.30.06		
0813, Field Artillery Survey	0802.03.01	0802.03.03	0802.03.06	0802.03.07
	0802.03.08	0802.03.17	0802.05.08	0803.01.02
	0803.01.03	0803.01.04	0803.01.06	0811.05.01
	0811.05.19	0844.12.01	0844.12.02	0844.12.03
	0844.12.04	0844.12.05	0844.12.06	0844.12.07
	0844.12.08	0844.12.09	0844.12.10	0844.12.11
	0844.12.12	0844.12.13	0844.12.14	0844.12.15
	0844.12.16	0844.12.17	0844.12.18	0844.12.19
	0844.12.20	0844.12.21	0844.12.22	0844.12.23
	0844.12.24	0844.12.25	0844.12.26	0844.12.27
	0844.12.28	0844.12.29	0844.12.30	0844.12.31
	0844.12.32	0844.12.33	0844.12.35	0844.12.38

DISTANCE LEARNING PRODUCTS	TASK NUMBERS			
	0844.12.39	0844.12.40	0844.12.41	0844.12.42
	0844.12.43	0844.12.44	0844.12.45	0844.12.46
	0848.13.01	0848.13.02	0848.13.03	0848.13.04
	0848.13.05	0848.13.06	0848.13.07	0848.13.08
	0848.13.09	0848.13.10	0848.13.11	0848.13.13
	0848.13.14	0848.13.15	0848.13.16	0848.13.17
	0848.13.18	0848.13.19	0848.13.20	0848.13.21
	0848.13.22	0848.13.23	0848.13.24	0848.13.25
	0848.13.26	0848.13.27	0848.13.28	0848.13.29
	0848.13.30	0848.13.31	0848.13.32	0848.13.34
	0848.13.35	0848.13.38	0848.13.39	0848.13.40
	0848.13.41	0848.13.42	0848.13.43	0848.13.44
	0848.13.45	0848.13.46		
0816, Howitzer Section Chief	0802.05.02	0811.02.01	0811.02.02	0811.02.03
	0811.02.04	0811.02.05	0811.02.06	0811.02.12
	0811.02.14	0811.02.15	0811.02.16	0811.02.17
	0811.02.18	0811.02.19	0811.02.20	0811.02.21
	0811.02.22	0811.02.23	0811.02.24	0811.02.25
	0811.02.26	0811.02.27	0811.02.28	0811.02.29
	0811.02.30	0811.02.31	0811.02.32	0811.02.34
	0811.03.01	0811.03.02	0811.03.04	0811.03.05
	0811.03.06	0811.03.07	0811.03.10	0811.03.12
	0811.03.14	0811.03.15	0811.03.16	0811.03.17
	0811.03.18	0811.03.19	0811.03.20	0811.03.21
	0811.05.19	0811.06.29		
0820, The M198 155mm Towed Howitzer	0811.01.03	0811.01.04	0811.01.05	0811.01.07
	0811.01.08	0811.01.10	0811.01.11	0811.01.12
	0811.01.13	0811.01.14	0811.01.16	0811.01.17
	0811.01.22	0811.01.23	0811.01.24	0811.01.25
	0811.01.26	0811.01.27	0811.02.20	0811.02.31
	0811.02.32	0811.03.10	0811.03.15	0811.03.18
	0811.03.20	0811.03.21	0811.05.19	0811.06.29
0861, Basic Forward Observation Procedures	0802.01.01	0802.01.03	0802.01.04	0802.01.05
	0802.01.06	0802.01.07	0802.01.08	0802.01.09
	0802.01.13	0802.01.14	0802.01.15	0802.01.16
	0802.01.17	0802.01.18	0802.01.19	0802.01.20
	0802.01.22	0802.01.23	0802.01.24	0802.01.27
	0802.01.28	0802.01.29	0802.01.31	0803.01.07
	0811.05.19	0844.12.36	0844.12.37	0845.01.01
	0845.02.01	0845.02.02	0845.02.03	0845.02.04
	0845.02.05	0845.02.07	0845.02.08	0845.02.09
	0845.02.10	0845.02.11	0845.02.12	0845.02.13
	0845.02.25	0845.02.27	0845.02.29	0845.02.30
	0848.13.36	0848.13.37	0861.03.01	0861.03.03
	0861.03.05	0861.03.06	0861.03.07	0861.03.08
	0861.03.09	0861.03.10	0861.03.11	0861.03.17
	0861.03.18	0861.03.19	0861.03.20	0861.03.21
	0861.03.22	0861.03.23	0861.03.24	0861.03.27
	0861.03.28	0861.03.29	0861.03.33	0861.03.34
	0861.03.35	0861.03.44	0861.03.53	
1320, Fundamentals of Diesel Engines (Web)	0802.10.01	0803.01.06	0811.03.07	0811.05.19
1330, Basic Shop Fundamentals for the Mechanic	0802.10.01	0811.05.09	0811.05.19	
1334, Diesel Engine Maintenance	0802.10.01	0803.01.06	0811.03.07	0811.05.19
1335, Fundamentals of Diesel Engines	0802.10.01	0803.01.06	0811.03.07	0811.05.19
2515, Antenna Construction and Propagation of Radio Waves	0802.01.01	0802.06.01	0802.06.02	0802.06.03
	0811.05.19	0842.01.01	0842.01.03	0845.01.01
	0845.02.15	0845.02.16	0845.02.17	0845.02.24
	0845.02.30	0848.28.02	0861.02.01	0861.02.04
	0861.02.07	0861.02.08	0861.02.09	0861.02.10

DISTANCE LEARNING PRODUCTS	TASK NUMBERS			
	0861.02.11 0861.02.19	0861.02.15 0861.02.24	0861.02.16 0861.03.53	0861.02.17
2525, Communications Security	0811.05.19 0861.02.09 0861.02.16 0861.02.25	0861.02.02 0861.02.10 0861.02.17	0861.02.07 0861.02.11 0861.02.18	0861.02.08 0861.02.15 0861.02.24
2532, HF/UHF Field Radio Equipment	0802.01.34 0845.02.08 0845.02.12 0845.02.17 0861.02.15 0861.02.23	0802.06.01 0845.02.09 0845.02.13 0845.02.18 0861.02.16 0861.03.42	0845.01.01 0845.02.10 0845.02.15 0845.02.20 0861.02.17 0861.03.44	0845.02.07 0845.02.11 0845.02.16 0845.02.30 0861.02.18 0861.03.53
2538, Single Channel Ground-Airborne Radio System (SINCGARS)	0802.01.01 0811.05.08 0845.01.01 0861.02.01 0861.02.09 0861.02.20	0802.06.01 0811.05.19 0845.02.20 0861.02.04 0861.02.10 0861.02.23	0802.06.02 0842.01.01 0845.02.24 0861.02.07 0861.02.11	0811.04.12 0842.01.03 0848.28.02 0861.02.08 0861.02.19
2551, Field Wire Equipment and Procedures	0811.05.19	0861.02.21	0861.02.23	
3503, Motor Transport NCO: Combat Operations	0802.05.04 0811.05.19	0811.04.12	0811.05.07	0811.05.08
3530, Incidental Motor Vehicle Operator	0802.05.04 0811.04.12 0861.02.08 0861.02.16	0803.01.04 0811.05.08 0861.02.09 0861.02.17	0803.01.06 0811.05.19 0861.02.10	0811.03.07 0845.02.17 0861.02.11
3532, Incidental Motor Vehicle Operator (CD)	0802.05.04 0811.04.12 0861.02.08 0861.02.16	0803.01.04 0811.05.08 0861.02.09 0861.02.17	0803.01.06 0811.05.19 0861.02.10	0811.03.07 0845.02.17 0861.02.11
3538, Dispatching Procedures for Motor Transport	0802.05.04	0811.05.19		
3580, Automotive Engine Maintenance and Repair	0802.10.01	0803.01.06	0811.03.07	0811.05.19
571, NBC Individual Survival Measures	0802.01.01 0811.05.06 0845.01.01	0802.12.01 0811.05.13	0802.12.04 0811.05.16	0811.04.12 0811.05.19
5710, NBC Decontamination Team Procedures	0802.12.02 0811.05.16	0802.12.03 0811.05.19	0811.05.14	0811.05.15
5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance	0802.05.03 0811.04.12 0811.05.19	0802.12.01 0811.05.08 0844.12.47	0802.12.04 0811.05.13 0848.13.47	0803.01.04 0811.05.16 0861.01.15
7400, Warfighting Skills Distance Education Program	0802.04.16 0840.01.02 0840.01.06 0840.02.01 0848.37.06	0802.05.02 0840.01.03 0840.01.07 0840.02.02	0803.01.04 0840.01.04 0840.01.08 0840.02.03	0811.05.19 0840.01.05 0840.01.09 0848.37.05
8500, Amphibious Warfare Distance Education Program (Phase I)	0802.04.16 0840.01.04 0840.01.08 0840.02.03	0803.04.01 0840.01.05 0840.01.09	0840.01.02 0840.01.06 0840.02.01	0840.01.03 0840.01.07 0840.02.02
8600, Amphibious Warfare Distance Education Program (Phase II)	0802.04.16 0840.01.04 0840.01.08 0840.02.03	0803.04.01 0840.01.05 0840.01.09	0840.01.02 0840.01.06 0840.02.01	0840.01.03 0840.01.07 0840.02.02

PERFORMANCE SUPPORT TOOLS

1. General. This appendix includes a list of all currently available or planned performance support tools (PST) designed to provide training related to any task in this OccFld.

2. Format. The columns are as follows:

a. PERFORMANCE SUPPORT TOOLS. This column summarizes all PSTs assigned to at least one ITS task in this OccFld.

b. TASK NUMBERS. A listing of all ITS tasks associated with the corresponding PST.

PERFORMANCE SUPPORT TOOLS	TASK NUMBERS			
AN/PSN-11 PLGR Aid	0802.01.01	0802.03.10	0802.05.06	0802.05.08
	0802.14.01	0802.14.02	0802.14.03	0802.14.04
	0802.14.05	0802.14.06	0802.14.07	0802.14.08
	0802.14.09	0802.14.10	0811.01.02	0811.04.12
	0811.05.08	0811.05.19	0844.12.23	0844.28.01
	0844.28.02	0844.28.03	0844.28.04	0844.28.05
	0844.28.06	0844.28.07	0844.28.08	0844.28.09
	0844.28.10	0845.04.13	0845.04.14	0848.24.01
	0848.24.02	0848.24.03	0848.24.04	0848.24.05
	0848.24.06	0848.24.07	0848.24.08	0848.24.09
	0848.24.10	0861.01.13	0861.01.14	
AN/PSN-11 PLGR Handbook	0802.01.01	0802.03.10	0802.05.06	0802.05.08
	0802.14.01	0802.14.02	0802.14.03	0802.14.04
	0802.14.05	0802.14.06	0802.14.07	0802.14.08
	0802.14.09	0802.14.10	0811.01.02	0811.04.12
	0811.05.08	0811.05.19	0844.12.23	0844.28.01
	0844.28.02	0844.28.03	0844.28.04	0844.28.05
	0844.28.06	0844.28.07	0844.28.08	0844.28.09
	0844.28.10	0845.04.13	0845.04.14	0848.24.01
	0848.24.02	0848.24.03	0848.24.04	0848.24.05
	0848.24.06	0848.24.07	0848.24.08	0848.24.09
	0848.24.10	0861.01.13	0861.01.14	
Chemical Warfare	0802.05.03	0802.12.01	0802.12.02	0802.12.03
	0811.04.12	0811.05.13	0811.05.14	0811.05.15
	0811.05.16	0811.05.19	0844.12.47	0848.13.47
	0861.01.15			
Forward Air Controller	0802.01.34	0802.01.35	0802.04.01	0802.04.02
	0802.04.03	0802.04.04	0802.04.10	0802.04.13
	0803.01.07	0811.05.19	0844.12.36	0844.12.37
	0845.02.06	0845.02.07	0845.02.08	0845.02.09
	0845.02.10	0845.02.11	0845.02.12	0845.02.13
	0845.02.30	0848.13.36	0848.13.37	0861.01.15
	0861.03.11	0861.03.17	0861.03.42	0861.03.43
	0861.03.44	0861.03.45	0861.03.46	0861.03.47
	0861.03.48	0861.03.49	0861.03.50	0861.03.51
	0861.03.52	0861.03.53	0861.04.08	0861.04.19
	0861.04.20	0861.04.22	0861.05.05	
Laying Methods & Hasty Survey Methods	0802.03.01	0802.03.03	0802.03.06	0802.03.07
	0802.03.08	0802.03.17	0802.03.20	0802.05.08
	0803.01.04	0811.02.05	0811.02.16	0811.02.17
	0811.02.18	0811.02.19	0811.02.29	0811.04.03
	0811.04.04	0811.04.05	0811.04.12	0811.05.01
	0811.05.04	0811.05.19	0811.06.21	0811.06.22
	0811.06.23	0844.12.31	0844.12.32	0848.37.08

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INDIVIDUAL TRAINING STANDARDS

1. General. This enclosure contains all of the ITSs for this OccFld, grouped by MOS. Each MOS is contained in a separate Appendix to Enclosure (6).

2. Format. For each ITS, the following elements of information are provided:

a. TASK. The task describes a specific and necessary behavior expected of a Marine in a particular MOS or billet. It is a clearly stated, performance-oriented action requiring a learned skill. Skills that "make" a Marine or qualify that Marine for the appropriate MOS are designated as "CORE." Those advanced skills that are mission, grade, or billet specific are designated as "CORE PLUS."

b. CONDITION(S). This portion of the ITS describes the equipment, manuals, assistance/supervision, special physical demands, environmental conditions, and location affecting a Marine's performance of the task under real-world circumstances.

c. STANDARD(S). This portion of the ITS describes the level of proficiency to which the individual must perform the task.

d. PERFORMANCE STEPS. Collectively, the performance steps represent the logical sequence of actions required of the Marine to perform the task to standard. These actions are typically detailed in the references.

e. INITIAL TRAINING SETTING. All ITSs are assigned an initial training setting that includes a specific location for initial instruction [Functional Learning Center (FLC) or Managed On-The-Job Training (MOJT)], a sustainment factor (number of months between evaluation or retraining to maintain the proficiency required by the standard), and a "Required By" grade (the lowest grade at which task proficiency is required).

f. REFERENCE(S). References are doctrinal publications, technical manuals, and other publications upon which the ITS and its performance steps are based. They should be readily available and provide detail to the procedures that are only summarized in the performance steps.

g. TRAINING MATERIEL (Optional). Training materiel includes all training devices, simulators, aids, equipment, and materials [except ammunition, distance learning (DL) products, and performance support tools (PST)] required or recommended to properly train the task under the specified conditions and to the specified standard. Mandatory items are preceded by an asterisk(*).

h. AMMUNITION (Optional). This table, if present, depicts the ammunition, explosives, and/or pyrotechnics required for proper training of the ITS.

i. DISTANCE LEARNING PRODUCT(S) (Optional). This section includes a list of any currently available or planned DL products designed to provide training related to this task.

j. PERFORMANCE SUPPORT TOOL(S) (Optional). This section includes a list of any currently available or planned PSTs designed to provide training related to this task.

k. ADMINISTRATIVE INSTRUCTIONS (Optional). Administrative instructions provide the trainer/instructor with special required or recommended circumstances, including safety precautions, relating to the training or execution of the task. These instructions may also clarify the meaning of the task.

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MOS 0802, FIELD ARTILLERY OFFICER

DUTY AREA 01 - OBSERVED FIRE

TASK: 0802.01.01 (CORE) DIRECT THE OPERATIONS OF THE FORWARD OBSERVER (FO) TEAM

CONDITION(S): Given a Forward Observer (FO) team with appropriate equipment, a tactical scenario requiring the equipment of the FO team, commander's guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Define the command and control relationship between the Forward Observer (FO) team and the supported maneuver commander.
2. Supervise a Forward Observer (FO) team in various type maneuver organizations (Infantry Company, Mechanized Infantry Company, Tank Company, LAR Company, etc.).
3. Explain five tasks accomplished by the Forward Observer (FO) team.
4. Employ organic equipment authorized to Forward Observer (FO) teams to include:
 - a. Map.
 - b. OF Fan.
 - c. Terrain Sketch.
 - d. Visibility Diagram.
 - e. M2 Compass.
 - f. Binoculars.
 - g. AN/GVS-5A.
 - h. AN/PRC-119.
 - i. AN/PAQ-3 MULE.
 - j. PLGR.
 - k. Observer Digital Terminal.
5. Brief the maneuver commander on capabilities of the Forward Observer (FO) team.
6. Supervise the selection and occupation of an OP.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FM 6-30, Observed Fire Procedures
4. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0332, Reconnaissance Marine
3. 0335, Infantry Patrolling

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- 4. 0381, Land Navigation
- 5. 0385, Land Navigation (Web)
- 6. 0861, Basic Forward Observation Procedures
- 7. 2515, Antenna Construction and Propagation of Radio Waves
- 8. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
- 9. 571, NBC Individual Survival Measures

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
 - 2. AN/PSN-11 PLGR Handbook
-

TASK: 0802.01.02 (CORE PLUS) SUPERVISE AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) EQUIPPED OBSERVATION POST

CONDITION(S): Given the references, a map of the target area, an AN/PAQ-3 MULE with components, a Forward Observer (FO) team, an information sheet containing situation overlay, and a zone of observation.

STANDARD(S): Per the references, ensuring the Modular Universal Laser Equipment (MULE) is used as the primary source of target location.

PERFORMANCE STEPS:

- 1. Consider mutual support and coordination within the maneuver element if more than one laser designator is in use.
- 2. Ensure the position has an uninterrupted line of sight to the target area, provides cover and concealment, facilitates communications, and is near the expected avenues of approach and likely positions of high priority targets.
- 3. Activate the MULE.
- 4. Determine position as accurately as possible, keeping the FDC informed of the location. Locate yourself by using the MULE via back azimuths and distances.
- 5. Determine and report polar plot data of several prominent points around the position.
- 6. Use the MULE to construct a visibility diagram for the position by ranging along selected defiladed areas.
- 7. Enter the proper Pulse Repetition Frequency (PRF) code if designating for laser guided munitions.
- 8. Determine if the line of sight is interfered with by obstructions which are likely to reflect the laser energy and generate false distances. If this condition exists, use the minimum range setting on the MULE.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. DB-9-86, Laser Designators, Rangefinders, Seekers, and Guided Munitions
- 2. FM 6-30, Observed Fire Procedures
- 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
- 4. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

ADMINISTRATIVE INSTRUCTIONS: The MULE will be treated as a loaded weapon, never pointed at friendly personnel, and always pointed downrange.

TASK: 0802.01.03 (CORE) PLACE THE OBSERVED FIRE (OF) FAN ON A MAP

CONDITION(S): Given the references, a map, an Observer Fire (OF) fan (GTA 6-7-3), a compass, binoculars, a known target location (target), and a zone of observation.

STANDARD(S): Properly, per the reference.

PERFORMANCE STEPS:

1. Place the vertex of the fan over the observer's location.
2. Place the center radial over the center of the observer's sector of responsibility.
3. Ensure a radial line is parallel to a grid line.
4. Label the radial lines.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. GTA 6-7-3, OF Fan
3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures
-

TASK: 0802.01.04 (CORE) CONSTRUCT A TERRAIN SKETCH

CONDITION(S): Given the references, a compass, a pad of paper, pencils, and an information sheet containing a zone of observation and responsibility.

STANDARD(S): Per the references, accurately depicting a panoramic representation of the terrain in the zone of observation/responsibility.

PERFORMANCE STEPS:

1. Draw a panoramic representation of the terrain within the zone of observation.
 - a. Draw the skyline first.
 - b. Draw intermittent crests.
 - c. Draw all natural terrain features.
 - d. Draw all man-made objects.
2. Determine and label the direction to all reference points.
3. Update, as time permits.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0332, Reconnaissance Marine
 2. 0861, Basic Forward Observation Procedures
-

TASK: 0802.01.05 (CORE PLUS) PREPARE A VISIBILITY DIAGRAM

CONDITION(S): Given the reference, a map, your location, a compass, binoculars, a pad of paper, pencils, and an information sheet containing a zone of observation and responsibility.

STANDARD(S): Per the reference, accurately depicting areas that are both visible and not visible from your location.

PERFORMANCE STEPS:

1. Plot your location.
2. Draw lines from your location out to the farthest limits of your zone of observation and responsibility.
3. Label the radial lines with the correct direction.
4. Construct a profile along each line marking points that are not visible.
5. Connect the points and shade the areas between these points, graphically showing the areas that cannot be seen from your location.
6. Label the diagram and send it to the Fire Support Coordination Center (FSCC), as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0332, Reconnaissance Marine
3. 0861, Basic Forward Observation Procedures

TASK: 0802.01.06 (CORE) LOCATE A TARGET BY GRID COORDINATES

CONDITION(S): Given equipment organic to the Forward Observer (FO) Team and the references.

STANDARD(S): Accurately announcing the six-digit grid coordinate of the identified target within a 200-meter tolerance and within 50 seconds.

PERFORMANCE STEPS:

1. Orient the map.
2. Use terrain association to refine and determine the grid.
3. Announce the grid coordinates.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation

- 2. 0385, Land Navigation (Web)
 - 3. 0861, Basic Forward Observation Procedures
-

TASK: 0802.01.07 (CORE) LOCATE A TARGET BY POLAR PLOT

CONDITION(S): Given equipment organic to the Forward Observer (FO) Team and the references.

STANDARD(S): Within 50 seconds after identification and within 200 meters of the actual location. Express direction to the nearest 10 mils and within 50 mils of the actual direction. Express distance to the nearest 100 meters. Express target altitude to the nearest 5 meters.

PERFORMANCE STEPS:

- 1. Determine and announce the direction to the target.
- 2. Determine the distance to the target.
- 3. Determine the vertical shift (up or down) to the target. If it is less than 30 meters, ignore the vertical shift.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

- 1. 0381, Land Navigation
 - 2. 0385, Land Navigation (Web)
 - 3. 0861, Basic Forward Observation Procedures
-

TASK: 0802.01.08 (CORE) LOCATE A TARGET BY SHIFT FROM A KNOWN POINT

CONDITION(S): Given the references, equipment organic to an Forward Observer (FO) Team, and a known point.

STANDARD(S): Announcing the target location within 50 seconds after identification and locating the target to within 200 meters of the actual location. Express direction to the nearest 10 mils and within 50 mils of the actual direction. Express right or left corrections to the nearest 10 meters and range corrections to the nearest 100 meters. Express target altitude to the nearest 5 meters.

PERFORMANCE STEPS:

- 1. Determine the observer-target direction.
- 2. Use the mil relation formula to determine the lateral shift from the known point to the target.
- 3. Announce the lateral shift.
- 4. Determine and announce the range change from the known point to the target.
- 5. Determine and announce the vertical shift (up or down) from the known point to the target. Ignore the vertical shift if the difference is less than 30 meters.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures

2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.09 (CORE) CONDUCT AN ADJUST FIRE MISSION

CONDITION(S): Given the references and equipment organic to the Forward Observer (FO) Team.

STANDARD(S): Completing a call for fire within 60 seconds of target identification, announcing subsequent corrections within 15 seconds of the burst (deviation to the nearest 10 meters, range to the nearest 100 meters, and HOB corrections to the nearest 5 meters), and entering fire for effect (FFE) within +/-50 meters of the target using no more than three adjusting rounds. Coordinates must be within 200 meters of the actual target location.

PERFORMANCE STEPS:

1. Transmit the complete Call For Fire (CFF).
2. Determine and transmit OT direction with or before the first correction, when using the grid method of target location.
3. Transmit subsequent corrections in the proper sequence.
4. Enter Fire For Effect (FFE).
5. Transmit refinement data (if any), Record as Target (if desired), End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS:

1. If the PE in range is greater than or equal to 30 meters, the observer may call FFE when a 200 meter bracket is split.
2. When an FO is MULE equipped, one round adjust missions should be standard.

TASK: 0802.01.10 (CORE) CONDUCT FIRE MISSIONS USING AN OBSERVER DIGITAL TERMINAL

CONDITION(S): Given the references, a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, an observer digital terminal, pencil, and paper.

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STANDARD(S): Transmitting a routine/basic call for fire within 120 seconds of target identification, announcing subsequent corrections within 30 seconds of the burst, and entering Fire For Effect (FFE) within +/-50 meters of the target.

PERFORMANCE STEPS:

1. Establish digital communications with the Fire Direction Center (FDC).
2. Transmit the complete Call For Fire (CFF).
3. Transmit subsequent corrections.
4. Transmit Fire For Effect (FFE).
5. Transmit refinement data (if any), Record as Target (if desired), End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
3. TM 11-5895-1325-12, DCT Operations Manual

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

ADMINISTRATIVE INSTRUCTIONS:

1. When an FO is MULE equipped, one round adjust missions should be standard.
2. Time standards are dependent upon type of mission.
3. Applicable to any type fire mission.

TASK: 0802.01.11 (CORE PLUS) CONDUCT FIRE MISSIONS WITH THE AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given the references, an AN/GVS-5 Laser Range Finder, a compass, a map, a designated target, and communications with the Fire Direction Center (FDC).

STANDARD(S): Per the references, accurately measuring and announcing the target distance, to the nearest 10 meters.

PERFORMANCE STEPS:

1. Determine observer target direction.
2. Remove the lens cover.
3. Set the PWR switch at ON.
4. Aim the laser at the target.
5. Lase the target.
6. Express range to the target.

7. Use the minimum range setting, when appropriate, or when the multiple target warning light illuminates.
8. Transmit the Call For Fire (CFF) using polar plot data.
9. Determine range to burst and transmit appropriate deviation and range corrections.
10. Fire for effect (FFE).
11. Transmit refinement data (if any), Record as Target (if desired), END OF MISSION, and surveillance.
12. Set the PWR switch at OFF.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
3. TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	3.000 EA	3.000 EA	18.000 EA
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	3.000 EA	3.000 EA	18.000 EA

TASK: 0802.01.12 (CORE) CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)

CONDITION(S): Given the references, an AN/PAQ-3 Modular Universal Laser Equipment (MULE), a map, a designated target and communications with the Fire Direction Center (FDC).

STANDARD(S): Obtaining target information within 15 seconds after target identification, announcing range to within 10 meters, azimuth to within 2 mils, and vertical angle within 5 mils of the actual target location.

PERFORMANCE STEPS:

1. Set up the AN/PAQ-3 MULE for operation.
2. Enter the proper Pulse Repetition Frequency (PRF) code for laser guided munitions.
3. Assume a stable sitting or kneeling position.
4. When target appears, keep the viewing eye in the same relative position with respect to the eyepiece.
5. Determine if the line of sight is interfered with by obstructions which are likely to reflect the laser energy and generate false distances. Use the minimum range setting adjustment if this condition exists.
6. Lase the center of the target. If lasing for laser guided munitions, lase HIGH CENTER so as not to hit the road wheels or slope of the target.
7. Determine range, azimuth, VA to the target.

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- 8. Transmit the Call For Fire (CFF).
- 9. Track moving targets by applying smooth horizontal and vertical corrections to the handle on the traversing unit.
- 10. Lase the target for the appropriate duration to provide terminal guidance for the munition, (e.g. lase for the last 13 seconds of the time of flight for the copperhead round).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. DB-9-86, Laser Designators, Rangefinders, Seekers, and Guided Munitions
- 2. FM 21-26, Map Reading and Land Navigation
- 3. FM 6-30, Observed Fire Procedures
- 4. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
- 5. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	3.000 EA	3.000 EA	18.000 EA
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	3.000 EA	3.000 EA	18.000 EA

ADMINISTRATIVE INSTRUCTIONS: The MULE will be treated as a loaded weapon, never pointed at friendly personnel, and always pointed downrange.

TASK: 0802.01.13 (CORE) CONDUCT A MISSION ON A PLANNED TARGET

CONDITION(S): Given planned targets (from the target list), the references, and communications with the Fire Direction Center (FDC).

STANDARD(S): Correctly transmitting a Call For Fire (CFF) within 30 seconds of target identification.

PERFORMANCE STEPS:

- 1. Prepare and transmit the Call For Fire (CFF).
- 2. Determine and transmit correction data if not within 200 meters.
- 3. Transmit refinement, End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	3.000 EA	3.000 EA	18.000 EA

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D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
N340	FUZE, PD, M739	3.000 EA	3.000 EA	18.000 EA
	May use N335 M557 PD SQ/D.			
N523	PRIMER, PERCUSSION, M82	3.000 EA	3.000 EA	18.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.14 (CORE) CONDUCT AN IMMEDIATE SUPPRESSION MISSION

CONDITION(S): Given equipment organic to the Forward Observer (FO) Team, a target that needs to be immediately suppressed, and the references.

STANDARD(S): Correctly transmitting a Call For Fire (CFF) within 60 seconds of target identification and ensuring initial target location is within 300 meters of the actual target location.

PERFORMANCE STEPS:

1. Locate the target.
2. Prepare and transmit the Call For Fire (CFF).
3. If required, transmit subsequent corrections within 15 seconds of HE round impact. (Make bold subsequent corrections to get rounds immediately on target.)
4. Transmit final refinement data, End of Mission (EOM), and the effects observed (after the desired effect is obtained).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540 CHG PROP 155MM, GREEN BAG, M3	4.000 EA	4.000 EA	24.000 EA
May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544 PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
N340 FUZE, PD, M739	4.000 EA	4.000 EA	24.000 EA
May use N335 M557 PD SQ/D or N464 VT M732 or N463 VT M728			
N523 PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.15 (CORE) CONDUCT A FIRE FOR EFFECT (FFE) MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Locating a target within +/-50 meters of the actual location and transmitting the Call For Fire (CFF) within 2 minutes of target identification.

PERFORMANCE STEPS:

1. Determine the target location.
2. Prepare and transmit the Call For Fire (CFF).

3. Transmit refinement data (if any), Record as Target (if desired), End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	4.000 EA	4.000 EA	24.000 EA
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.16 (CORE) CONDUCT AN ILLUMINATION MISSION

CONDITION(S): Given equipment organic to an Forward Observer (FO) Team and the references.

STANDARD(S): Ensuring the illumination Call For Fire (CFF) is transmitted within 2 minutes and the target is adequately illuminated.

PERFORMANCE STEPS:

- 1. Locate the target.
- 2. Transmit the complete illumination call for fire, in proper sequence.
- 3. Determine and transmit subsequent corrections.
- 4. Complete the mission.
- 5. Transmit appropriate refinement, End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2	4.000 EA	4.000 EA	24.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
N285	FUZE M577 MT May use N248 MT M565.	4.000 EA	4.000 EA	24.000 EA
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

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TASK: 0802.01.17 (CORE) CONDUCT A COORDINATED ILLUMINATION MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references, suspected enemy ACTIVITY is detected during the hours of darkness.

STANDARD(S): Illumination call for fire is transmitted within 60 seconds (120 seconds with ODT) of detecting suspected enemy ACTIVITY; illumination is adjusted to illuminate the suspected target; the suspected target is positively identified as enemy; HE call for fire is transmitted within 60 seconds (120 seconds with ODT) of identifying the target as enemy; initial HE round is within 200 meters of the actual target; and, the HE FFE is within +/-50 meters of the actual target.

PERFORMANCE STEPS:

1. Transmit the complete illumination Call For Fire (CFF), in proper sequence.
2. Determine and transmit subsequent corrections to include HOB, if required.
3. Once target is illuminated, determine target location.
4. Transmit coordinated illumination Call For Fire (CFF), in proper sequence.
5. Transmit "MARK" when the illumination round best illuminates the target.
6. Determine and transmit subsequent corrections within 15 seconds of High Explosive (HE) round impact.
7. Fire For Effect (FFE).
8. Transmit refinement data (if any), Record as Target (if desired), End of Mission (required), and surveillance (required).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2	7.000 EA	7.000 EA	42.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	12.000 EA	12.000 EA	72.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N285	FUZE M577 MT	7.000 EA	7.000 EA	42.000 EA
	May use N248 MT M565.			
N340	FUZE, PD, M739	5.000 EA	5.000 EA	30.000 EA
	May use N335 M557 PD SQ/D.			
N523	PRIMER, PERCUSSION, M82	12.000 EA	12.000 EA	72.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS: NVGs and/or NVSS will not be used.

TASK: 0802.01.18 (CORE PLUS) CONDUCT A FASCAM MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) team and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Obtain permission from the commander to fire FASCAM.
- 2. Transmit the Call For Fire (CFF) to initiate a FASCAM minefield.
- 3. Conduct the mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-20-5, Field Artillery Delivered Scatterable Mines
- 2. FM 6-30, Observed Fire Procedures
- 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D501	155MM M692 ADAM-L May use D502 155mm M731 ADAM-S.	12.000 EA	12.000 EA	72.000 EA
D503	155MM M718 RAAM-L May use D509 155mm M741 RAAMS-S.	12.000 EA	12.000 EA	72.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	27.000 EA	27.000 EA	162.000 EA
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
N285	FUZE M577 MT	24.000 EA	24.000 EA	144.000 EA
N340	FUZE, PD, M739	3.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	27.000 EA	27.000 EA	162.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.19 (CORE PLUS) CONDUCT A DPICM MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Transmit the Call For Fire (CFF) to initiate an DPICM mission.
- 2. Conduct the mission.
- 3. Make appropriate corrections.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 may use D541 155mm M4 series, white bag, with zones 3 through 7.	7.000 EA	7.000 EA	42.000 EA
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
D563	PROJ 155MM, HE DP ICM, M483A1	4.000 EA	4.000 EA	24.000 EA

N285	FUZE M577 MT	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739	3.000 EA	3.000 EA	18.000 EA
	May use N335 M557 PD SQ/D.			
N523	PRIMER, PERCUSSION, M82	7.000 EA	7.000 EA	42.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures
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TASK: 0802.01.20 (CORE) CONDUCT A DANGER CLOSE FIRE MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Per the references, using creeping fire procedures properly.

PERFORMANCE STEPS:

1. Determine the target location.
2. Prepare and submit the Call For Fire (CFF).
3. Determine and transmit subsequent corrections within 15 seconds of burst.
4. Adjust fires using creeping fire techniques.
5. Request Fire For Effect (FFE).
6. Transmit refinement data (if any), Record as Target, End of Mission (required), and surveillance (required).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540 CHG PROP 155MM, GREEN BAG, M3	5.000 EA	5.000 EA	30.000 EA
May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544 PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N340 FUZE, PD, M739	5.000 EA	5.000 EA	30.000 EA
May use N335 M557 PD SQ/D.			
N523 PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures
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TASK: 0802.01.21 (CORE PLUS) CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Transmitting both Calls For Fire (CFF) within 2 minutes of identification of the last target. Initial target locations must be within 200 meters of the actual location of the target. Fire For Effect (FFE) must be within 50 meters of each target, with no more than three subsequent rounds used in adjustment.

PERFORMANCE STEPS:

1. Determine location of targets.

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- 2. Prepare and transmit both Calls For Fire (CFFs), in the proper sequence.
- 3. Precede corrections with, "TARGET NUMBER".
- 4. Complete missions using normal procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	10.000 EA	60.000 EA
D544	PROJ 155MM, HE, M107	0.000 EA	10.000 EA	60.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	0.000 EA	10.000 EA	60.000 EA
N523	PRIMER, PERCUSSION, M82	0.000 EA	10.000 EA	60.000 EA

TASK: 0802.01.22 (CORE PLUS) ADJUST FINAL PROTECTIVE FIRES

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Per the references, adjusting the Final Protective Fires (FPF) to the exact location specified by the company commander.

PERFORMANCE STEPS:

- 1. Select an adjusting point based on the maneuver commander's guidance.
- 2. Transmit the complete call for fire in the proper sequence announcing, "DANGER CLOSE."
- 3. Determine and transmit subsequent corrections for each piece to the nearest 10 meters.
- 4. Adjust fires using creeping fire techniques.
- 5. Continue adjustment until round bursts within 50 meters of the desired location.
- 6. Transmit refinement data and instruct the Fire Direction Center (FDC) to begin firing the next piece.
- 7. When last piece is adjusted; FPF is adjusted.
- 8. End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	32.000 EA	32.000 EA	192.000 EA

D544	PROJ 155MM, HE, M107	32.000 EA	32.000 EA	192.000 EA
N340	FUZE, PD, M739	32.000 EA	32.000 EA	192.000 EA
	May use N335 M557 PD SQ/D.			
N523	PRIMER, PERCUSSION, M82	32.000 EA	32.000 EA	192.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS:

- 1. If the FDC is BCS or BUCS equipped, only the center weapon is adjusted onto the center grid of the FPF and the adjustment is then terminated.
- 2. Manual gunnery requires that all guns be adjusted into the FPF.
- 3. A MULE equipped observer may lase specific aimpoints for each gun in the firing element. Each gun will then be aimed at that point. This TTP can be used to cover smaller areas of deadspace where a linear sheaf would not be appropriate.

TASK: 0802.01.23 (CORE) CONDUCT AN IMMEDIATE SMOKE MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Totally obscuring the target using WP or M825, and ensuring the initial target location is within 300 meters of the actual target location and the Call For Fire (CFF) is transmitted within 30 seconds of target location.

PERFORMANCE STEPS:

- 1. Determine the placement point of immediate smoke.
- 2. Transmit the complete Call For Fire (CFF) in the proper sequence.
- 3. Determine and transmit subsequent corrections, as required.
- 4. Spot initial rounds and determine and transmit deviation and range corrections to provide effective coverage. Minimum deviation and range corrections are 50 and 100 meters, respectively.
- 5. Determine height-of-burst corrections, as necessary.
- 6. End mission when desired results are achieved.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D528 PROJ 155MM, SMOKE, WP, M825	4.000 EA	4.000 EA	24.000 EA
D540 CHG PROP 155MM, GREEN BAG, M3	5.000 EA	5.000 EA	30.000 EA
may use D541 155mm M4 series, white bag, with zones 3 through 7.			
D550 PROJ 155MM, SMOKE, WP, M110A1	1.000 EA	1.000 EA	6.000 EA
N285 FUZE M577 MT	4.000 EA	4.000 EA	24.000 EA
N340 FUZE, PD, M739	1.000 EA	1.000 EA	6.000 EA
May use N335 M557 PD SQ/D.			
N523 PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

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DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS: Firing standards will be directed by unit SOP.

TASK: 0802.01.24 (CORE) CONDUCT A QUICK SMOKE MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Successfully denying enemy observation using WP or M825 and ensuring initial target location is within 200 meters of the actual target location. The Call For Fire (CFF) must be transmitted within 90 seconds of target identification, and subsequent corrections made within 15 seconds of the previous burst.

PERFORMANCE STEPS:

1. Determine the size of the area to be obscured or screened.
2. Determine the wind direction in relation to the maneuver-target line.
3. Determine the desired obscuration effect (visual or infrared/IR).
4. Determine the adjusting point.
5. Prepare and transmit Call For Fire (CFF).
 - a. Announce observer identification.
 - b. Announce adjust fire.
 - c. Announce High Explosive (HE) adjusting point location.
 - d. Transmit the target length.
 - e. Transmit the maneuver-target direction.
 - f. Transmit wind direction.
 - (1) Left cross.
 - (2) Right cross.
 - (3) Head wind.
 - (4) Tail wind.
 - g. Transmit the duration time that the smoke is required.
 - h. Announce effects desired ("IR" must be announced for infrared effects; when omitted visual effects are requested by default).
 - i. Complete the Call For Fire (CFF).
6. If target is located by grid coordinate, transmit the OT direction before or with the first correction.
7. Transmit High Explosive (HE) corrections.
8. Switch to smoke when a 200-meter bracket is split.
9. Request fire for effect with smoke following adjustment of initial smoke round, if desired effects achieved.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures

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2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D528	PROJ 155MM, SMOKE, WP, M825	6.000 EA	6.000 EA	36.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	15.000 EA	15.000 EA	90.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
D550	PROJ 155MM, SMOKE, WP, M110A1	6.000 EA	6.000 EA	36.000 EA
N285	FUZE M577 MT	6.000 EA	6.000 EA	36.000 EA
N340	FUZE, PD, M739	9.000 EA	9.000 EA	54.000 EA
	May use N335 M557 PD SQ/D.			
N523	PRIMER, PERCUSSION, M82	15.000 EA	15.000 EA	90.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS:

- 1. If the M825 round is used, no HOB adjustment is necessary.
- 2. Standard should be observed under ideal weather conditions.

TASK: 0802.01.25 (CORE PLUS) CONDUCT A DESTRUCTION MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Successfully destroying the target.

PERFORMANCE STEPS:

- 1. Locate target.
- 2. Transmit call for fire ensuring "Destruction" is used as type of adjustment.
- 3. Adjust rounds to the target utilizing precision registration procedures.
- 4. Continue to fire rounds at the target.
- 5. Make corrections, as necessary (normally after every third round).
- 6. Fire until the target is destroyed.
- 7. Transmit End Of Mission (EOM) and surveillance.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3	10.000 EA	10.000 EA	60.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544	PROJ 155MM, HE, M107	10.000 EA	10.000 EA	60.000 EA
N340	FUZE, PD, M739	10.000 EA	10.000 EA	60.000 EA
	May use N335 M557 PD SQ/D.			
N523	PRIMER, PERCUSSION, M82	10.000 EA	10.000 EA	60.000 EA

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ADMINISTRATIVE INSTRUCTIONS: Destruction puts a target out of action permanently. Exact percentages to define "destruction" vary and are determined by the commander based on the situation.

TASK: 0802.01.26 (CORE) CONDUCT A MISSION ON A MOVING TARGET

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Per the references, successfully engaging a moving target using the special techniques required for the situation.

PERFORMANCE STEPS:

1. Identify a moving target.
2. Select an Intercept Point (IP) along the target’s likely route of march as the target location.
3. Prepare and transmit a Call For Fire (CFF).
 - a. State the target is moving in your target description portion of the call for fire.
 - b. State AMC in the "Method of Fire" portion of the call for fire.
4. Determine when to fire based on rate of speed of the target and time of flight (determine a trigger point).
5. Conduct the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May us N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

ADMINISTRATIVE INSTRUCTIONS: Adjust rounds to IP if possible. This will improve first round accuracy and increase the damage to the target.

TASK: 0802.01.27 (CORE) CONDUCT A PRECISION REGISTRATION, QUICK AND TIME

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team, the references, and an MTO from the FDO initiating the precision registration.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the OT factor.
2. Draw a diagram of the impact of all rounds, recording the spottings to the nearest mil.

3. Split the 100-meter bracket by requesting, "ADD (DROP) 50."
4. Spot the next round. Split the 50-meter bracket by requesting, "2 ROUNDS, ADD (DROP) 25", as appropriate, to obtain an opposite spotting.
5. Request, "1 ROUND, ADD (DROP) 25", as appropriate, if these rounds are spotted opposite that of the previous spotting, to make the next round impact opposite the last 2 rounds.
6. Determine and announce the range and deviation refinement data to the nearest 10 meters.
7. Announce, "RECORD AS REGISTRATION POINT, TIME REPEAT, OVER."
8. Request, "3 ROUNDS, REPEAT", once a measurable airburst is obtained.
9. Record the spotting of each round.
10. Determine the appropriate mean HOB correction of the 4 rounds to achieve a 20-meter HOB.
11. Transmit HOB refinement--"HOB CORRECTION, RECORD AS TIME REGISTRATION POINT, END OF MISSION."

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D54 155mm M4 series, white bag, with zones 3 through 7.	13.000 EA	13.000 EA	78.000 EA
D544	PROJ 155MM, HE, M107	13.000 EA	13.000 EA	78.000 EA
N286	FUZE M582 MTSQ May use N278 MTSQ M564.	6.000 EA	6.000 EA	36.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	7.000 EA	7.000 EA	42.000 EA
N523	PRIMER, PERCUSSION, M82	13.000 EA	13.000 EA	78.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.28 (CORE) CONDUCT A HIGH-BURST OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, an aiming circle or battery commander's scope, a surveyed OP, directional control, and orienting data.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Correctly set up instruments.
2. Orient the instruments before the first round is fired, per the Fire Direction Center's (FDC) instructions.
3. Report to the Fire Direction Center (FDC) when ready to observe.
4. Measure and report the spotting of the impacts and/or bursts.

- 5. Reorient the instrument to the location of the first round only.
- 6. Continue observing until the Fire Direction Center (FDC) ends the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	8.000 EA	8.000 EA	48.000 EA
D544	PROJ 155MM, HE, M107	8.000 EA	8.000 EA	48.000 EA
N290	FUZE, ELECTRONIC TIME Used only for high-burst	8.000 EA	8.000 EA	48.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD or N278 MTSQ M564 or N286 MTSQ M582.	8.000 EA	8.000 EA	48.000 EA
N523	PRIMER, PERCUSSION, M82	8.000 EA	8.000 EA	48.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.29 (CORE) CONDUCT AN ABBREVIATED REGISTRATION

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, a designated registration point, a zone of observation, and an MTO from the FDO initiating the abbreviated registration.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Initiate Abbreviated registration
- 2. Determine and transmit subsequent corrections.
- 3. Record registration point and time registration point correctly.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N286	FUZE M582 MTSQ May use N278 MTSQ M564.	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD.	3.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0802.01.30 (CORE PLUS) CONDUCT A MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)

CONDITION(S): Given the references, an AN/PAQ-3 Modular Universal Laser Equipment (MULE), communications with the Fire Direction Center (FDC), a designated registration point, an AN/PSC-2 Digital Communications Terminal (if so equipped), a map, and a MessageTo Observer (MTO) fromtheFireDirectionOfficer (FDO) initiatingaregistration.
STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Set up the MULE for operation.
- 2. Lase the bursts of the rounds.
- 3. Transmit the direction, distance, and VA of the bursts to the Fire Direction Center (FDC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	0.000 EA	5.000 EA	30.000 EA
N286	FUZE M582 MTSQ May use N278 MTSQ M564.	0.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD.	0.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	0.000 EA	5.000 EA	30.000 EA

TASK: 0802.01.31 (CORE PLUS) ADJUST NAVAL GUNFIRE (NGF)

CONDITION(S): Given a scenario in which Naval Gunfire (NGF) spot teams and HF communications are not located with the unit, the references, equipment organic to a Forward Observer (FO) Team, communications with the Fire Support Coordination Center (FSCC), and a supporting ship.

STANDARD(S): Per the references, ensuring the Call For Fire (CFF) is transmitted within 60 seconds of target identification and subsequent corrections are sent within 15 seconds of round impact (25 seconds if observer is moving).

PERFORMANCE STEPS:

- 1. Determine if the target is suitable for Naval Gunfire (NGF).
- 2. Determine target location within +/- 200 meters of the actual target location.
- 3. Prepare and transmit the complete Call For Fire (CFF) to either the artillery liaison officer or the NGLO at the Fire Support Coordination Center (FSCC) via the COF net.
- 4. Transmit subsequent corrections.

- 5. Engage target using naval gunfire terms and techniques.
- 6. Initiate Fire For Effect (FFE) when a 200 meter bracket is split for an area target and a 100 meter bracket for a point target.
- 7. Transmit End Of Mission (EOM) and surveillance.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

REFERENCE(S):

- 1. ATP-4(D), Allied Spotting Procedures for Naval Gunfire Support
- 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 4. FM 6-30, Observed Fire Procedures
- 5. FMFM 1-7, Supporting Arms in Amphibious Operations
- 6. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D295	5-INCH/54 HE FUZE CVT	0.000 EA	4.000 EA	8.000 EA
D326	5-INCH/54 HE FUZE QUICK	0.000 EA	4.000 EA	8.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures
-

TASK: 0802.01.32 (CORE PLUS) CONDUCT FIRE MISSION ON IRREGULARLY SHAPED TARGETS

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, and an irregularly shaped target.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Prepare and transmit complete Call For Fire (CFF), in proper sequence, within 120 seconds of target identification.
- 2. Locate the target center within +/- 200 meters of actual location.
- 3. Transmit two grids or a center grid with length and attitude to describe linear targets.
- 4. Transmit attitude to the nearest 100 mils and within 200 mils of the actual attitude. (Attitude is always less than 3200 mils.)
- 5. Transmit circular target location as a center grid and a radius.
- 6. Transmit three or more grids to locate a target when needed. For example, use three or more grids to accurately portray a uniquely shaped target that is "L" shaped.
- 7. Determine and transmit subsequent corrections.
- 8. Adjust on target center using hasty or successive bracketing.
- 9. Send all subsequent corrections within 15 seconds of HE burst.
- 10. Transmit refinement data (if any), Record as Target (if desired), End Of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	0.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD.	0.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	0.000 EA	5.000 EA	30.000 EA

TASK: 0802.01.33 (CORE PLUS) CONDUCT A COPPERHEAD MISSION

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, and a laser pulse repetition frequency code.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine and report operator cloud height.
- 2. Identify the target.
- 3. Select the proper number of rounds based on the number of targets.
- 4. Transmit the copperhead Call For Fire (CFF).
- 5. Designate the target for 13 seconds when given the command, "LASER ON" by the Fire Direction Center (FDC).
- 6. Terminate the mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D510	PROJ 155MM, COPPERHEAD, M712	2.000 EA	2.000 EA	12.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	2.000 EA	2.000 EA	12.000 EA
N523	PRIMER, PERCUSSION, M82	2.000 EA	2.000 EA	12.000 EA

TASK: 0802.01.34 (CORE PLUS) DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE

CONDITION(S): Given a scenario involving a close air support strike with no Forward Air Controller (FAC), the references, equipment organic to a Forward Observer (FO) Team, an attack aircraft with ordnance, and an information sheet containing: an aircraft call sign, mission number, type ordnance load, enemy situation, friendly situation, attack restrictions, and a radio frequency.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Consider the air threat situation.
2. Obtain the commander's approval before sending the Close Air Support (CAS) request.
3. Send immediate requests to the Fire Support Coordination Center (FSCC).
4. Transmit immediate Close Air Support (CAS) requests within 2 minutes of target identification.
5. Plan for and implement Suppression of Enemy Air Defenses (SEAD) as required based on the assessment of the air threat. (See task 0802.01.35, CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION.)
6. Transmit the 9 line brief to the pilot when the aircraft reaches the CP.
7. Transmit the Time To Target (TTT) to the pilot after the 9 line brief.
8. Mark the target using artillery, mortars, or Naval Gunfire (NGF). The mark should be within 300 meters of the target and 30 seconds before Time To Target (TTT).
9. Give the pilot final adjustment, in meters, from the marking round (reference point, to the target).
10. Ensure attack aircraft is lined up on proper target before, "CLEARING HOT."
11. Adjust from previous aircraft hits to target giving reference to cardinal headings for follow-on aircraft.
12. Transmit effects of the strike to the aircraft and Fire Support Coordination Center (FSCC), as appropriate.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FM 6-30, Observed Fire Procedures
4. FMFM 5-4, Offensive Air Support
5. FMFM 5-4A, Close Air Support and Close-In Fire Support
6. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
7. STANAG 3797, Minimum Qualifications for Forward Air Controller

DISTANCE LEARNING PRODUCT(S):

1. 2532, HF/UHF Field Radio Equipment

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller

ADMINISTRATIVE INSTRUCTIONS: This task must be conducted concurrently with Task 0802.01.35.

TASK: 0802.01.35 (CORE) CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, the need to suppress enemy air defenses in the vicinity of the target area, ingress and egress routes, and access to the Forward Air Controller (FAC).

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STANDARD(S): Per the references, successfully coordinating with friendly air, and transmitting the Call For Fire (CFF) in the correct sequence.

PERFORMANCE STEPS:

1. Identify Suppression of Enemy Air Defense (SEAD) targets and location to mark.
2. Transmit the Call For Fire (CFF).
3. Direct the target to be marked.
4. Ensure the marking round impacts 30 seconds before the aircraft's bombs impact on the target.
5. Ensure the marking round is within 300 meters of the target.
6. Complete the mission.
7. Record the Suppression of Enemy Air Defense (SEAD) target, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2	2.000 EA	2.000 EA	12.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	8.000 EA	8.000 EA	48.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
D550	PROJ 155MM, SMOKE, WP, M110A1	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739	6.000 EA	6.000 EA	36.000 EA
	May use N335 M557 PD.			
N523	PRIMER, PERCUSSION, M82	8.000 EA	8.000 EA	48.000 EA

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller

TASK: 0802.01.36 (CORE) INTEGRATE COMPANY ORGANIC INDIRECT FIRE WEAPONS INTO FIRE PLANS

CONDITION(S): Given the references, the maneuver commander's guidance, the company's scheme of maneuver, current intelligence, and the order from the commander to plan the fires of the company's organic indirect fire weapons.

STANDARD(S): Per the references, successfully supporting the scheme of maneuver/concept of operations.

PERFORMANCE STEPS:

1. Obtain and keep current information on weapon positions.
2. Know weapon characteristics, status, and capabilities.
3. Coordinate the plan with the Weapons Platoon Commander, if possible.
4. Obtain Company Commander's approval of the plan.
5. Coordinate the plan with the Fire Support Coordination Center (FSCC).
6. Disseminate the plan to the appropriate agencies.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

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ENCLOSURE (3)

REFERENCE(S):

1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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DUTY AREA 02 - FIRE DIRECTION

TASK: 0802.02.01 (CORE) APPLY THE PRINCIPLE OF ARTILLERY BALLISTICS TO ARTILLERY FIRES

CONDITION(S): Given a list of artillery ballistic terms and the references.

STANDARD(S): Per the references, correctly defining and explaining the causes and effects of each term, and its relationship to artillery accuracy and massing of fires.

PERFORMANCE STEPS:

1. Define Interior Ballistics and its effect on accuracy and massing fires.
2. Define Transitional Ballistics.
3. Define Exterior Ballistics and its effect on accuracy and massing fires.
4. Define Dispersion and Probability.
5. Define Inherent Error.
6. Define the Mean Point of Impact.
7. Define Probable Error.
8. Define Range Probable Error.
9. Define Deflection Probable Error.
10. Define Time to Burst Probable Error.
11. Define Height of Burst Probable Error.
12. Define Range to Burst Probable Error.
13. Define Fork.
14. Define Dispersion Zones.
15. Demonstrate the usage of the Assurance Table in determining Registration Validity.
16. Demonstrate the usage of the Assurance Table in determining Muzzle Velocity Variation Validity.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0802.02.02 (CORE) APPLY THE FIVE REQUIREMENTS FOR ACCURATE PREDICTED FIRE

CONDITION(S): Given the references, a tactical scenario, and factors affecting the technical solution of firing data.

STANDARD(S): Per the references, correctly identifying and isolating the factors preventing delivery of accurate predicted fires and massing fires, and taking appropriate corrective action.

PERFORMANCE STEPS:

1. Assess the firing unit’s ability to meet the five requirements for accurate predicted fire.
2. Explain the effect of each requirement on accurate predicted fires and on the ability to mass fires at all echelons.
3. Determine corrective actions required to meet the five requirements for accurate predicted fire, as appropriate, to the tactical situation.
4. Take appropriate corrective actions, depending on available assets, the tactical situation, and commander’s guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0802.02.03 (CORE) CONDUCT MUZZLE VELOCITY (MV) MANAGEMENT

CONDITION(S): Given the references, a firing battery, an M94 chronograph, Battery Computer System (BCS), a Backup Computer System (BUCS), a data base, measured Muzzle Velocity (MVs), NAVMC 10558A, MV worksheet and record forms and logbook, and a Muzzle Velocity Correction Table.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Maintain Muzzle Velocity (MV) logbook.
2. Direct measurement of Muzzle Velocity (MVs) upon receipt of a new lot of propellant.
3. Verify chronograph readouts as a calibrated Muzzle Velocity (MV).
4. Infer second lot MVVs and MVs for all howitzers in the unit.
5. In the absence of a chronograph, determine howitzer shooting strength using pullover gauge readings or EFCs.
6. Determine predicted Muzzle Velocity (MV) by adding propellant lot efficiency to shooting strength.
7. Update Muzzle Velocity (MV) logbook.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCTM 09814A-14&P, M94 Muzzle Velocity System
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0802.02.04 (CORE) VERIFY THE CONSTRUCTION OF A SURVEYED FIRING CHART

CONDITION(S): Given a grid sheet, plotting equipment, known data, and the reference.

STANDARD(S): Per the reference, ensuring data is plotted/determined within the following tolerances: plotted positions, +/- 10 meters; all indices (direction), +/- 1 mil.

PERFORMANCE STEPS:

1. Determine and announce the Lower Left Hand Corner (LLHC) of the chart.

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- 2. Verify the construction of the firing chart.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0802.02.05 (CORE) VERIFY A BATTERY COMPUTER UNIT (BCU) DATA BASE

CONDITION(S): Given a Battery Computer System (BCS), known data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify communications parameters.
- 2. Verify met use, map information, howitzer information, ammunition, MVV's, geometry, masks, observer, target/known point information, and registration information are entered.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FC 6-40-2, Battery Computer System BCS Job Aids
-

TASK: 0802.02.06 (CORE) SUPERVISE THE CONSTRUCTION AND MAINTENANCE OF A TACTICAL SITUATION MAP

CONDITION(S): Given an operational Fire Direction Center (FDC), Operations Order, situation map, Unit SOP, commander's guidance, Target List Worksheet/Scheduling Worksheet containing groups and series, Fire Support Coordination Measures, Maneuver Control Points, Target Acquisition Assets, Friendly Unit Location and unit boundaries, enemy situation and locations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the plotting of boundaries, maneuver control points, and other maneuver control measures.
- 2. Verify the plotting of all friendly units including target acquisition assets.
- 3. Verify the plotting of all fire support coordination measures.
- 4. Verify the plotting of targets.
- 5. Verify the graphical portrayal of scheduled groups and series.
- 6. Verify the plotting of enemy units.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols
 - 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
-

TASK: 0802.02.07 (CORE) ISSUE A FIRE ORDER

CONDITION(S): Given an operational Fire Direction Center (FDC), commander's guidance, JMEMs and GMET, local combat Standing Operating Procedures (SOP), and a Call For Fire (CFF).

STANDARD(S): Per the references, accurately determining the amount and type of munitions needed to achieve desired effects and issue the fire order.

PERFORMANCE STEPS:

1. Evaluate current tactical situation in accordance with active FSCMs.
2. Establish Fire Order/Fire Command standards.
3. Determine how to attack the target.
4. Issue battery/battalion fire order, as appropriate.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0802.02.08 (CORE) VERIFY A BACKUP COMPUTER SYSTEM (BUCS) DATA BASE

CONDITION(S): Given a Backup Computer System (BUCS), known data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify map modification.
2. Verify firing unit location and weapons locations.
3. Verify ammunition information.
4. Verify measured or historical muzzle velocities.
5. Verify target/known point information.
6. Verify observer location.
7. Verify MET data.
8. Verify MET conversion.
9. Verify Registration Data, if applicable.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FC 6-40-31, Backup Computer System Job Aids--Cannon Application
-

TASK: 0802.02.09 (CORE) VERIFY COMPUTATION OF FIRING DATA

CONDITION(S): Given the references and a Fire Direction Center (FDC) equipped with manual and automated fire direction.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify chart range.
2. Verify propellant charge to be fired.
3. Verify deflection.
4. Verify fuze setting, if applicable.

- 5. Verify quadrant.
- 6. Verify fire commands.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FC 6-40-2, Battery Computer System BCS Job Aids
- 2. FC 6-40-31, Backup Computer System Job Aids--Cannon Application
- 3. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

ADMINISTRATIVE INSTRUCTIONS:

- 1. The officer is not required to perform verification, but to ensure data is verified.
- 2. Preferred means of verification is manual.

TASK: 0802.02.10 (CORE) APPLY THE FIVE STEPS TO IMPROVE FIRING DATA

CONDITION(S): Given a tactical scenario and the factors affecting the technical solution of firing data, a requirement for the firing unit to improve the accuracy of the firing data solution, and the references.

STANDARD(S): Per the references, ensuring all of the appropriate corrective actions are taken on a continuing basis.

PERFORMANCE STEPS:

- 1. Analyze the mission assigned, commander's guidance, Unit SOP, and the tactical situation.
- 2. Analyze availability of meteorological, survey (position & target), ammunition information, muzzle velocity variation, and position constants.
- 3. Analyze troops available.
- 4. Analyze time available to complete calculations required to improve the accuracy of firing data.
- 5. Analyze terrain and weather and their impact on improving the accuracy of firing data.
- 6. Take corrective actions, as appropriate, to METT-T, assets available, and the tactical situation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0802.02.11 (CORE) COMPUTE ALL REQUIRED SAFETY DATA

CONDITION(S): Given the references and a scenario involving a unit about to conduct live fire with all required manual and automated assets.

STANDARD(S): Per the references, ensuring compliance with local range regulations.

PERFORMANCE STEPS:

- 1. Construct a safety diagram.

- 2. Determine the altitudes at the minimum and maximum ranges.
- 3. Compute data by appropriate method and references.
- 4. Construct safety T(s), as required.
- 5. Update data and safety T(s), as required, by appropriate references and local range regulations.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FC 6-40-31, Backup Computer System Job Aids--Cannon Application
- 2. JREGTO 3570.1_, Standard Operating Procedures for Field Artillery Safety
- 3. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0802.02.12 (CORE PLUS) SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS

CONDITION(S): Given an operational Fire Direction Center (FDC), Operations Order, situation map, Unit SOP, commander’s guidance, target list, a target bulletin, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the recording of the list of targets.
- 2. Verify the displaying of the targets on situation map overlay and the plotting of targets on the firing chart (battery Fire Direction Center (FDC)).
- 3. Identify and resolve conflicts and duplications.
- 4. Update the list of target/target list, as appropriate, based upon target bulletin(s).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols
- 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0802.02.13 (CORE) DETERMINE APPROPRIATE ACTIONS TO IMPROVE THE ACCURACY OF FIRING DATA USING THE BCS

CONDITION(S): Given a scenario in which the firing unit’s fires are inaccurate, a Fire Direction Center (FDC) equipped with Battery Computer System (BCS), Operations Order, situation map, MCFSS SOP, Unit SOP, commander’s guidance, operational Battery Computer System (BCS) with a previously recorded data base, communications, a Battery Computer System (BCS) operator, and the references.

STANDARD(S): Per the references, reviewing all known data and accurately determining the appropriate action to improve the firing data.

PERFORMANCE STEPS:

- 1. Identify the need to improve accuracy of firing data.
- 2. Determine the cause of the inaccurate fire.
- 3. Determine what actions are required to improve accuracy based on the tactical situation.

4. Apply appropriate actions to improve accuracy.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 2. ST 6-40-2, Battery Computer System BCS Job Aids
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DUTY AREA 03 - CANNON

TASK: 0802.03.01 (CORE) EMPLOY THE APPROPRIATE HASTY SURVEY TECHNIQUE FOR DIRECTIONAL AND POSITIONAL CONTROL

CONDITION(S): Given a tactical scenario involving the absence of accurate survey data, an available survey team that requires the unit to provide its own survey control, aiming posts, a 1:50,000 map, and the following equipment, where appropriate: an M2A2 aiming circle complete with filter, communications with a flank station, identifiable celestial bodies (day or night), a station with a known azimuth to an azimuth mark, a pencil and paper to plan a directional traverse, a grid sheet, overlay paper, standard Fire Direction Center (FDC) plotting equipment, coordinates of a known point and the direction to an azimuth mark, equipment to be used when determining distance using the subtense method, subtense tables, a GPS (if so equipped), an AN/GVS-5, Battery Computer System (BCS) with job aids, Backup Computer System (BUCS) with job aids, and survey chip.

STANDARD(S): Per the references, ensuring consonance between the existing situation and the method of hasty survey.

PERFORMANCE STEPS:

1. Evaluate the situation and determine the best method to obtain directional control.
 - a. Choose the appropriate method.
 - b. Employ one of the following methods to obtain directional control:
 - (1) Hasty simultaneous observation.
 - (2) Polaris-Kochab method.
 - (3) The directional traverse method.
 - (4) Backup Computer System (BUCS) resection.
 - (5) Backup Computer System (BUCS) astronomical observation.
2. Evaluate the situation and determine the best method to obtain positional control.
 - a. Choose the appropriate method.
 - b. Employ one of the following methods to obtain positional control:
 - (1) Graphic resection.
 - (2) Graphic traverse: Conduct distance measurement using either premeasured wire, pacing, subtense, or laser.
 - (3) Backup Computer System (BUCS) resection.
 - (4) Trilateration with AN/GVS-5.
 - c. Determine height.
3. Employ Backup Computer System (BUCS) or Battery Computer System (BCS) when conducting either directional or graphic traverse, as appropriate.

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- 4. Employ GPS (if so equipped) to obtain directional and positional control upon occupation prior to employing the above techniques.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FC 6-40-2, Battery Computer System BCS Job Aids
- 2. FC 6-40-31, Backup Computer System Job Aids--Cannon Application
- 3. MCWP 3-16.3, Field Artillery Cannon Battery
- 4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
- 5. TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods
-

TASK: 0802.03.02 (CORE) DETERMINE THE CAUSE OF INACCURATE FIRES

CONDITION(S): Given a scenario involving inaccurate fires, known data, a firing chart and fire control information (manual or automated), records of fire, gun procedures, and the references.

STANDARD(S): Per the references, ensuring faulty fire control information is corrected.

PERFORMANCE STEPS:

- 1. Evaluate accuracy of fires.
- 2. Determine that inaccuracies exist.
- 3. Determine direction and magnitude of the error.
- 4. Evaluate fire control data.
 - a. Evaluate and decide upon corrective action for errors in position area location and direction which are firing unit specific.
 - b. Evaluate and decide on corrective action for errors in target area location and direction.
 - c. Evaluate and decide on corrective action for errors in weapons and ammunition that are fire unit/gun specific.
 - d. Evaluate and decide on corrective action for errors in MET information.
 - e. Evaluate and decide on corrective action for errors in computation/Fire Direction Center (FDC) procedures which are fire unit/gun specific.
 - f. Evaluate and decide on corrective action for errors in gun procedures.
 - g. Evaluate and decide on corrective action for errors in observer procedures.
 - h. Evaluate and decide on corrective action for errors between firing elements.
- 5. Direct the appropriate corrective action to be taken.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FC 6-40-2, Battery Computer System BCS Job Aids
 2. FC 6-40-31, Backup Computer System Job Aids--Cannon Application
 3. MCWP 3-16.3, Field Artillery Cannon Battery
 4. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 5. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
-

TASK: 0802.03.03 (CORE) LAY THE FIRING BATTERY

CONDITION(S): Given the references, a firing battery, aiming circle and/or M-2 compass, map, and an azimuth of fire or aiming point.

STANDARD(S): Per the references, ensuring an accuracy of 0 mils within the time standards for the weapon system.

PERFORMANCE STEPS:

1. Determine the appropriate method of lay based upon the situation.
2. Lay the battery with an aiming circle.
 - a. Grid azimuth method.
 - b. Orienting angle method.
 - c. Howitzer backlay method.
3. Lay the battery with the M-2 compass.
 - a. M-2 compass method.
 - b. Aiming Point Deflection Method.
 - c. Howitzer backlay method.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods
-

TASK: 0802.03.04 (CORE) PREPARE THE EXECUTIVE OFFICER'S (XO'S) REPORT

CONDITION(S): Given the references, a firing battery which has been laid, a known data sheet consisting of: the azimuth of fire, orienting angle, common deflection, minimum QE, piece distribution (direction, distance, vertical angle from the aiming circle to each weapon), ammunition (type, lot, weight, propellant temperature, and quantity), deflection limits, paper, and pencil.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the lay of the battery.

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- 2. List the primary information in the XO's report by using the memory aid L-A-M-P.
 - a. L - Battery is laid.
 - b. A - Azimuth of fire, orienting angle, common deflection.
 - c. M - XO's minimum QE.
 - d. P - Piece distribution.
- 3. List the secondary information in the XO's report.
 - a. Ammunition amount, type, and lot.
 - b. Weight of projectile.
 - c. Propellant temperature.
 - d. Deflection limits.
 - e. Maximum elevation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
 - 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 - 3. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0802.03.05 (CORE) COMPUTE THE EXECUTIVE OFFICER'S (XO'S) MINIMUM QUADRANT ELEVATION (MIN QE)/MIN SAFE TIME

CONDITION(S): Given a scenario involving a firing battery occupying a new position with an obstruction in front of the weapons, propellant, fuzes, Piece-to-Crest Range (PCR), Rapid Fire Tables, and appropriate TFT for the howitzers.

STANDARD(S): Per the references, using either the Rapid Fire Tables or the TFT method.

PERFORMANCE STEPS:

- 1. NOTE: If the sum of the vertical angle required to achieve a 5-meter (5m) clearance is > 300 mils, use the following step-by-step computation. Always round up to whole mils.

Use manual computation to determine lowest elevation.
 - a. Determine angle 1 (angle of site). Use the greatest angle of site to crest reported or measured by all weapons.
 - b. Determine angle 2 (vertical clearance). Divide 5m Vertical Interval (VI) by the Piece-to-Crest Range (PCR), expressed in thousands.
 - c. Determine angle 3 (complimentary angle of site).
 - d. Determine angle 4 (elevation). Use corresponding Piece-to Crest Range (PCR) from the TFT (refer to table F).
 - e. Determine the fork value of angle 5 (margin of safety). Multiply the value in the TFT by 2 at the corresponding Piece-to-Crest Range (PCR) (forks x 2).
- 2. Use rapid fire tables to determine lowest elevation.
 - a. Determine angle of site to crest.

b. Enter rapid fire tables at the Piece-to-Crest-Range (PCR) with weapons system and fuze to be computed. Use verified PCR (the horizontal distance expressed to the nearest 100m).

c. Add angle of site to elevation corresponding to PCR.

NOTE: Minimum Quadrant Elevation (MIN QE) must be computed for each weapon.

3. Compute Minimum Quadrant Elevation (MIN QE) for every charge to be fired.

4. Compute Minimum Quadrant Elevation (MIN QE) for every new position.

5. During combat, compute Minimum Quadrant Elevation (MIN QE) for each 800 mil sector.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0802.03.06 (CORE) DECLINATE THE AIMING CIRCLE

CONDITION(S): Given an area free of magnetic attractions, a serviceable aiming circle, tape, notation pad, a surveyed declination station, and at least two surveyed azimuth markers, preferably placed in opposite directions and distanced at 1,000 meters from the station.

STANDARD(S): Per the references, accurately recording the information.

PERFORMANCE STEPS:

1. Set up and level the aiming circle over declination station.
2. Ensure the aiming circle is set up a sufficient distance from the following magnetic distractions:
 - a. High tension lines - 55m
 - b. Vehicles/railroad - 10m
 - c. Wire/barbed fences -10m
 - d. Helmets (small items) - 0.5m
- CAUTION: Remove watches with radioactive luminous dials, Marine Corps issue watches, or timepieces with magnetic bezel backs.
3. Set the known azimuth to the first azimuth marker (upper motion).
4. Sight on the first azimuth (lower motion).
5. Release and center the magnetic needle (upper motion).
6. Read declination constant and announce the reading to the nearest 0.5 mil.
7. Lock the magnetic needle (when not in use).
8. Set the known azimuth to the second azimuth marker (upper motion). Use second azimuth marker; if unavailable, use first marker again.
9. Repeat sequence of STEPS 3 through 6.
10. Add the readings and divide by 2 when two azimuth markers are used.
11. Write declination constant on tape, and place on aiming circle. On the notation pad, record four-digit mean declination constant, date, and initialize the performance.

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INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

TASK: 0802.03.07 (CORE) MEASURE THE ORIENTING ANGLE (OA)

CONDITION(S): Given an aiming circle set up and leveled over the Orienting Station (OS), an End of the Orienting Line (EOL) marked with an aiming post at a minimum distance of 100 meters, a howitzer that has just completed registration, and an assistant.

STANDARD(S): Per the references, using the proper commands, and within 1 minute.

PERFORMANCE STEPS:

- 1. Announce, "NUMBER (SO AND SO) REFER, AIMING POINT THIS INSTRUMENT."
- 2. (Gunner of referred piece) Announce, "NUMBER (SO AND SO) AIMING POINT IDENTIFIED, DEFLECTION (SO MUCH)."
- 3. Set announced deflection on upper motion.
- 4. Sight on howitzer using lower motion.
- 5. Sight on the End of Orienting Line (EOL) using upper motion.
- 6. Announce (to the Fire Direction Center (FDC)), "ORIENTING ANGLE (SO MUCH)."

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

TASK: 0802.03.08 (CORE) MEASURE THE AZIMUTH OF THE LINE OF FIRE

CONDITION(S): Given a situation when survey control is not available, in an area free of metal attractions, a declinated aiming circle which has been properly setup and leveled for operation, a howitzer that has just completed a registration, and an assistant.

STANDARD(S): Per the references, using the proper commands and ensuring an accuracy of 0 mils within 3 minutes.

PERFORMANCE STEPS:

1. Announce, "NUMBER (SO AND SO) REFER, AIMING POINT THIS INSTRUMENT."
2. (Gunner of referred piece) Announce, "NUMBER (SO AND SO) AIMING POINT IDENTIFIED, DEFLECTION (SO MUCH.)"
3. Set the announced deflection on the upper motion.
4. Sight on the howitzer pantel, using the lower motion.
5. Release the magnetic needle, and center it using upper motion.
6. Determine the Instrument Reading (IR) on the upper motion. Subtract the value of the IR from the declination constant.
7. Announce, "MEASURED AZIMUTH (SO MUCH)."

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods
-

TASK: 0802.03.09 (CORE) DECLINATE THE M2 COMPASS

CONDITION(S): Given a serviceable M2 compass, in an area free from magnetic attractions, a surveyed declination station, surveyed azimuth marker, and a non magnetic screw driver.

STANDARD(S): Per the references, ensuring the sight picture is correct and the reading matches the survey.

PERFORMANCE STEPS:

1. Ensure the area is free of magnetic distractions to include:
 - a. High tension lines - 55m
 - b. Vehicles/railroad - 10 m
 - c. Wire/barbed fences - 10 m
 - d. Helmets (small metal items) - 0.5m

CAUTION: Remove watches with radioactive luminous dials, Marine Corps issue watches, or timepieces with magnetic bezel backs.
2. Set M2 compass on aiming circle M24 tripod over the orienting station.
3. Center bubble in circular vial.
4. Sight on known azimuth.
5. Using non magnetic screw driver, rotate the azimuth scale until south-seeking black arrow indicates the surveyed azimuth is equal to the known azimuth.
6. Recheck sight picture and azimuth to known point.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

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REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. ST 6-50-20, Battery Executive Officer’s/Platoon Leader’s Handbook

TASK: 0802.03.10 (CORE) NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED

CONDITION(S): While mounted in a vehicle with cross-country capability and given a standard map of the area, a coordinate scale, a protractor, a vehicle with driver, and a compass.

STANDARD(S): Per the references, accurately directing the driver from a known point to a distant point using both terrain association and dead reckoning.

PERFORMANCE STEPS:

- 1. Determine affects of terrain on vehicle movement.
- 2. Determine affects of weather on vehicle movement.
- 3. Navigate by terrain association.
- 4. Navigate by dead reckoning.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 21-26, Map Reading and Land Navigation
- 2. FM 90-3 (HTF), Desert Operations (How To Fight)

DISTANCE LEARNING PRODUCT(S):

- 1. 0381, Land Navigation
- 2. 0385, Land Navigation (Web)

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

TASK: 0802.03.11 (CORE PLUS) OPERATE THE M94 MVS

CONDITION(S): Given an M94 MVS which has been set up for the weapon, accessories, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Turn on the M94 MVS.
- 2. Enter and edit mission data.
- 3. Use proper shutdown and disassembly procedures.
- 4. Ensure results are submitted to the Fire Direction Center (FDC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCTM 09814A-14&P, M94 Muzzle Velocity System

TASK: 0802.03.12 (CORE PLUS) SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT

CONDITION(S): Given an ammunition vehicle, a loading plan including safety precautions, adequate materials for dunnage, howitzer ammunition, an RT 4000 Forklift, a tarpaulin, sand bags (if needed), a crew, and the references.

STANDARD(S): Per the references, observing all safety precautions.

PERFORMANCE STEPS:

1. Ensure the ammunition is loaded securely and protected from damage and weather.
2. Ensure adherence to safety precautions.
3. Direct the crew to correct any errors observed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. JREGTO 3570.1_, Standard Operating Procedures for Field Artillery Safety
 2. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
 3. MCWP 3-16.3, Field Artillery Cannon Battery
 4. NAVSEA OP 5, VOL. 1, Ammunition and Explosives Ashore: Safety Regulations for Handling, Storing, Production, Renovation, and Shipping
 5. NAVSEA SW020-AF-ABK-010 (ESTDC), Motor Vehicle Driver and Shipping Inspector's Manual for Ammunition, Explosives, and Related Hazardous Materials
 6. NAVSEA SW023-AH-WHM-010 (ESTDC), Handling Ammunition and Explosives with Industrial Materiel Handling Equipment (MHE)
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TASK: 0802.03.13 (CORE) SUPERVISE THE PREPARATION OF A BATTERY FOR FIRING

CONDITION(S): Given a battery and the references.

STANDARD(S): Per the references, accomplishing all of the TLABSPAP steps.

PERFORMANCE STEPS:

1. Establish priorities and assign accordingly.
2. Accomplish the following steps:
 - a. T - Trails or firing platform properly emplaced.
 - b. L - Lay the weapon.
 - c. A - Emplace the Aiming Point (collimator).
 - d. B - Boresight verified or performed.
 - e. S - Second circle. Verification of lay performed with a second aiming circle.
 - f. P - Prefire checks on weapon system performed.
 - g. A - Ammunition prepared.
 - h. P - Position improvement (Site to crest determined, XO's report rendered, alternate aiming points established, camouflage, and defensive hardening of position).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

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REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

TASK: 0802.03.14 (CORE) MEASURE THE ANGLE OF SITE-TO-CREST AND THE PIECE-TO-CREST RANGE (PCR)

CONDITION(S): Given the references, an aiming circle or compass, a sector of fire, a map, and a measurable crest.

STANDARD(S): Per the references, reporting angle of site-to-crest to the nearest mil (compass-10 mils) and Piece-to-Crest Range (PCR) within 100 meters of the actual location.

PERFORMANCE STEPS:

- 1. Measure the angle of site-to-crest.
- 2. Measure Piece-to-Crest Range (PCR).
- 3. Report angle of site-to-crest and Piece-to-Crest Range (PCR) to the Executive Officer (XO).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery
- 3. ST 6-50-20, Battery Executive Officer’s/Platoon Leader’s Handbook

TASK: 0802.03.15 (CORE) DETERMINE WHETHER A HOWITZER IS SAFE TO FIRE

CONDITION(S): Given the references, a howitzer that has been laid and is ready to fire, a section crew, a safety "T", safety Standing Operating Procedures (SOP), and a series of fire commands.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Using safety "T"s, determine whether the data received is safe to fire.
- 2. Report unsafe data, and state whether unsafe data is outside the deflection limits, above or below the maximum or minimum quadrant, or below minimum safe time.
- 3. Verify deflection is set correctly.
- 4. Verify quadrant is set correctly.
- 5. Verify charge and lot on projectile or propellant.
- 6. Verify fuze and fuze setting.
- 7. Verify all safe conditions exist according to Reg Safety SOP.
- 8. Command, "CHECK FIRING", if any unsafe condition exists.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

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REFERENCE(S):

1. JREGTO 3570.1_, Standard Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3, Field Artillery Cannon Battery

TASK: 0802.03.16 (CORE) SUPERVISE THE PREPARATION OF A PROJECTILE FOR FIRING

CONDITION(S): Given the components of a complete round of artillery ammunition, SL-3 gear, fire commands, and the references.

STANDARD(S): Ensuring authorized artillery ammunition combinations and handling procedures are used, per the references.

PERFORMANCE STEPS:

1. Identify the four components of a complete round of artillery ammunition.
2. Identify proper shell/fuze combination from fire commands.
3. Identify proper propellant/projectile combination from fire commands.
4. Verify the proper setting of Fuze Time and Variable Time.
5. Ensure proper ammunition handling procedures are used.
6. Ensure only authorized shell/fuze combinations are prepared for firing.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
 2. MCWP 3-16.3, Field Artillery Cannon Battery
 3. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0802.03.17 (CORE) SET UP AND RECOVER THE M2A2 AIMING CIRCLE

CONDITION(S): Given the references, an area clear of magnetic attractions, a declinated aiming circle in the stowed position, an orienting station (OS) or other known point, a plumb bob, and an accessory case.

STANDARD(S): Per the references, leveling the aiming circle within 2 minutes and recovering it within 1 minute.

PERFORMANCE STEPS:

1. Set up the aiming circle (with tripod) for operation.
2. Level the aiming circle.
3. Recover the aiming circle.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
3. TM 9-1290-262-24, Organizational, Direct Support and General Support Maintenance Manual for Aiming Circle, M2 W/E and M2A2 W/E

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

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PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

TASK: 0802.03.18 (CORE PLUS) PERFORM CRATER ANALYSIS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: a crater; usable fuze furrow; declinated aiming circle, M2 compass (preferred), or a lensatic compass; D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation); WD-1 (communication wire) or a length of rope, wire, or string; map of local area; and plotting equipment.

STANDARD(S): Per the references, reporting the information to the S-2.

PERFORMANCE STEPS:

- 1. Determine high angle/low angle crater formed.
- 2. Determine the grid of the crater.
- 3. Determine the direction to hostile weapon using fuze furrow or side spray method.
- 4. Collect usable shell fragments.
- 5. Send shell fragments and information to S-2 and/or appropriate agency.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. MCWP 3-16.1, Marine Artillery Support
- 3. MCWP 3-16.3, Field Artillery Cannon Battery
- 4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence

ADMINISTRATIVE INSTRUCTIONS: The two methods of obtaining a direction to a hostile weapon from a low-angle fuze quick crater are the fuze furrow/center-of-crater method and the sidespray method. For best results, take the average of several directions, using both methods.

TASK: 0802.03.19 (CORE PLUS) PERFORM SHELL FRAGMENT ANALYSIS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: curvature template (to scale), DIA Projectile Fragmentation Identification Guide, dividers and a ruler, fragments and pieces of the projectile.

STANDARD(S): Per the references, reporting accurate information.

PERFORMANCE STEPS:

- 1. Collect and analyze shell fragments.
- 2. Tag usable fragments. Tag must contain:
 - a. Location of crater.
 - b. Direction to hostile weapon.
 - c. Date-time group of shelling.

3. Send information and shell fragments to commander, Fire Direction Center (FDC), or S-2.
4. Make the proper report to S-2.
 - a. Report grid location.
 - b. Report direction to firing guns.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCWP 3-16.1, Marine Artillery Support
3. MCWP 3-16.3, Field Artillery Cannon Battery
4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
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TASK: 0802.03.20 (CORE PLUS) LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY

CONDITION(S): Given a request for immediate fire support while the platoon/battery is in convoy, a map, a range-azimuth fan, a TFT, a Backup Computer System (BUCS) and/or Battery Computer System (BCS), and a Call For Fire (CFF).

STANDARD(S): Per the references, ensuring the accurate computation of initial firing data and subsequent corrections.

PERFORMANCE STEPS:

1. Monitor your position while on the move, constantly selecting possible emergency firing positions by map and visual reference.
2. Receive the Call For Fire (CFF) and authenticate the mission.
3. Ensure the Fire Direction Center (FDC) monitors the mission.
4. Notify the driver, and signal the convoy that a hip shoot is about to take place.
5. Select the position, and notify the Fire Direction Center (FDC) of the proposed grid coordinates.
6. Determine the best method to lay the unit, and lay the unit.
7. Set up the aiming circle to the side or rear of the weapons. (Note- Consider line of metal. Placing aiming circle in front of gunline will prohibit firing during laying.)
8. Ensure the Fire Direction Center (FDC) determines the azimuth of fire and computes initial data while the battery is being laid.
9. Ensure the vehicles, excluding the prime movers and Fire Direction Center (FDC), disperse to provide security for the battery.
10. Determine subsequent corrections; complete the fire mission; and either improve the position or march order.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. TFT's and Addendums

Annex I to
Appendix F to
ENCLOSURE (3)

- 2. MCWP 3-16.3, Field Artillery Cannon Battery
- 3. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods
-

TASK: 0802.03.21 (CORE PLUS) VERIFY THE UNIT COMMANDER’S RECORD (NAVMC 10558A)

CONDITION(S): Given a firing battery that has completed firing for a designated period, the NAVMC 10558A, a TFT, pencils, and a record of rounds fired (type and charge)(DA FORM 4513).

STANDARD(S): Per the reference, ensuring all required entries are made on the NAVMC 10558A.

PERFORMANCE STEPS:

- 1. Enter the date of firing in Column 1.
- 2. Record the projectile type and the model of round fired in Column 2.
- 3. Record the zone or charge fired in Column 3.
- 4. Record the rounds fired (by charge) in Column 4A.
- 5. Compute Equivalent Full Charge (EFC) for each charge, and record the value in Column 4B.
- 6. Compute the cumulative rounds fired in Column 5A by adding the rounds fired (Column 4A).
- 7. Compute the cumulative Equivalent Full Charge (EFC) rounds fired in column 5B by adding the EFC rounds fired (Column 4B).
- 8. Go to previous page and record the accumulative total rounds (Column 6A).
- 9. Go to the previous page and record the accumulative total of Equivalent Full Charge (EFC) (Column 6B).
- 10. Add 5A to 6A and record the accumulative total (Column 7A).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. TM 4700-15/1, Equipment Record Procedures

DISTANCE LEARNING PRODUCT(S):

- 1. 0414, Ground Maintenance Management Procedures for Supervisors
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TASK: 0802.03.22 (CORE PLUS) SUPERVISE AMMUNITION MANAGEMENT ON THE GUN LINE

CONDITION(S): Given the reference, a cannon battery in firing position, an ammunition load, and a mission.

STANDARD(S): Ensuring each howitzer has the required ammunition to respond to all fire missions.

PERFORMANCE STEPS:

- 1. Receive information on the battery mission from the battery Fire Direction Officer.
- 2. Supervise the battery ammunition section in the timely delivery of all ammunition components.

3. Ensure excessive amounts of ammunition are not delivered.
4. Ensure that all ammunition trash (pallets, banding materials, grommets, lifting plugs, fuze cans, etc.) is picked up and properly segregated for retrograde and/or disposal.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
 2. NAVSEA OP 5, VOL. 1, Ammunition and Explosives Ashore: Safety Regulations for Handling, Storing, Production, Renovation, and Shipping
 3. NAVSEA SW020-AF-ABK-010 (ESTDC), Motor Vehicle Driver and Shipping Inspector's Manual for Ammunition, Explosives, and Related Hazardous Materials
 4. NAVSEA SW023-AH-WHM-010 (ESTDC), Handling Ammunition and Explosives with Industrial Materiel Handling Equipment (MHE)
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DUTY AREA 04 - FIRE SUPPORT

TASK: 0802.04.01 (CORE) BRIEF THE MANEUVER COMMANDER ON EMPLOYMENT OF FIRE SUPPORT ASSETS

CONDITION(S): Given a tactical scenario including available Marine Air Ground Task Force (MAGTF) assets.

STANDARD(S): Per the references, including a recommendation of asset employment.

PERFORMANCE STEPS:

1. Explain the capabilities and limitations of artillery.
2. Describe the organization of Marine artillery.
3. Explain the capabilities and limitations of Naval Gunfire.
4. Explain the capabilities and limitations of Marine Aviation.
5. Explain the capabilities and limitations of mortars.
6. Recommend employment based upon a complete analysis.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FM 7-7, Mechanized Infantry Platoon and Squad
4. FM 71-1, Tank and Mechanized Company Team
5. FMFM 2-7-1, Fire Support Coordination by the MAGTF CE
6. FMFM 5-1, Marine Aviation
7. FMFM 5-4, Offensive Air Support
8. FMFM 7-90, Tactical Employment of Mortars
9. FMFM 9-1, Tank Employment/Countermechanized Operations
10. FMFM 9-2, Amphibious Vehicles
11. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

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ENCLOSURE (3)

- 12. MCWP 3-16.1, Marine Artillery Support
- 13. MCWP 3-42.1, Fire Support in MAGTF Operations
- 14. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations
- 15. OH 6-6, Marine Light Armor Employment

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0802.04.02 (CORE) BRIEF A FIRE SUPPORT COORDINATOR (FSC) ON FIELD ARTILLERY (FA) MISSIONS AND THEIR SEVEN INHERENT RESPONSIBILITIES

CONDITION(S): Given the references, an OPORD with standard, non-standard, and on-order tactical missions, and a tactical scenario wherein the Fire Support Coordinator (FSC) requires a briefing on Field Artillery (FA) missions and responsibilities.

STANDARD(S): Per the references, accurately defining, describing, and explaining the Field Artillery (FA) tactical missions and responsibilities to a Fire Support Coordinator (FSC).

PERFORMANCE STEPS:

- 1. Define the four command relationships.
- 2. Define the two part process in organizing for combat.
- 3. Define a tactical mission.
- 4. Describe the four Field Artillery (FA) standard tactical missions.
- 5. Describe the seven inherent responsibilities for each of the Field Artillery (FA) standard tactical missions.
- 6. Define nonstandard tactical missions.
- 7. Define on-order missions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 4. MCWP 3-16.1, Marine Artillery Support

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0802.04.03 (CORE) PREPARE A TARGET LIST WORKSHEET AND SCHEDULING WORKSHEETS

CONDITION(S): Given a tactical scenario, a map with overlay, plotting equipment, a list of targets, a scheduling worksheet, a target list worksheet, the references, and commander’s guidance.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Identify the five types of target symbols.
- 2. Plot targets on an overlay.

3. Prepare and submit a target list worksheet.
4. Prepare a scheduling worksheet for a preparation/counter preparation fire (based on the tactical situation), a series, and a group.
5. Utilize the NATO/ABCA targeting numbering system.
6. Identify fire support coordination principles.
7. Identify uses of multiple target engagement (group, series, or program).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
4. MCWP 3-16.1, Marine Artillery Support
5. MCWP 3-16A, Targeting Process
6. MCWP 3-42.1, Fire Support in MAGTF Operations

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller
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TASK: 0802.04.04(CORE) RECOMMEND EMPLOYMENT OF FIELD ARTILLERY (FA) SPECIAL MUNITIONS (SMOKE, ILLUMINATION, FASCAM, ICM, COPPERHEAD)

CONDITION(S): Given a tactical scenario that requires the planning of special munitions.

STANDARD(S): Per the references, ensuring consonance between the recommended munition and the tactical situation.

PERFORMANCE STEPS:

1. Explain smoke delivery techniques.
2. Explain smoke employment techniques and considerations.
3. Recommend appropriate smoke employment technique.
4. Explain the uses of illumination.
5. Explain the employment considerations for illumination.
6. Recommend appropriate illumination employment technique.
7. Explain the uses of FASCAM.
8. Explain the coordination required when FASCAM is used.
9. Explain the employment considerations for FASCAM.
10. Recommend appropriate FASCAM employment.
11. Explain the two different types of ICM rounds and employment considerations.
12. Recommend the employment of the appropriate ICM round.
13. Explain the employment considerations for the copperhead munition.
14. Explain the observer's tasks for the employment of copperhead.

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ENCLOSURE (3)

- 15. Explain the coordination required when copperhead is used.
- 16. Recommend appropriate copperhead employment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-20-30, Fire Support For Corps and Division
- 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 3. FM 6-30, Observed Fire Procedures
- 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 5. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0802.04.05 (CORE) BRIEF A MANEUVER COMMANDER ON THE FIRE SUPPORT PLAN

CONDITION(S): Given an offensive or defensive tactical situation, an OPORD, commander’s guidance, and a requirement to brief the maneuver commander on the fire support plan.

STANDARD(S): Per the references, ensuring consonance between the fire support plan and the mission requirements.

PERFORMANCE STEPS:

- 1. Explain the offensive/defensive fire support considerations.
- 2. Describe how the offensive/defensive fire support plan supports the operation.
- 3. Explain offensive/defensive considerations for special situations (MOUT, desert mountains, counter-insurgency, etc.)
- 4. Explain fire support considerations for special situations.
- 5. Explain a Quick Fire Plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. FMFM 2-7-1, Fire Support Coordination by the MAGTF CE
- 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 5. MCWP 3-42.1, Fire Support in MAGTF Operations

TASK: 0802.04.06 (CORE) INTERPRET AN ATTACK GUIDANCE (AG) MATRIX

CONDITION(S): Given the references, an Attack Guidance (AG) matrix, tactical situation, and commander’s guidance.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Explain the use, level, and location in the OPORD of the Attack Guidance (AG) matrix.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 3. MCWP 3-16A, Targeting Process
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TASK: 0802.04.07 (CORE) PREPARE AN ARTILLERY ESTIMATE OF SUPPORTABILITY

CONDITION(S): Given a tactical situation, commander's guidance, Courses Of Action (COA), and a mission.

STANDARD(S): Per the references and in written format.

PERFORMANCE STEPS:

1. Analyze the comparative capabilities of the artillery to support each contemplated Courses Of Action (COA).
2. Consider the following factors when considering each Courses of Action (COA):
 - a. Landing force mission.
 - b. Enemy situation.
 - c. Required artillery support.
 - d. Hydrography.
 - e. Topography.
 - f. Weather.
 - g. Observation requirements.
 - h. Communications requirements.
 - i. Positioning requirements, based upon mobility.
 - j. Ammunition available.
3. Prepare the estimate.
4. Brief the estimate.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 2. MCWP 3-16.1, Marine Artillery Support
 3. MCWP 5-1, Command and Staff Action
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TASK: 0802.04.08 (CORE PLUS) SUPERVISE THE OPERATIONS OF A FIRE SUPPORT COORDINATION CENTER (FSCC)

CONDITION(S): Given the references, a Fire Support Coordination Center (FSCC) complete with personnel and equipment, and a tactical situation requiring FSCC operations.

STANDARD(S): Per the references.

Annex I to
Appendix F to
ENCLOSURE (3)

PERFORMANCE STEPS:

1. Obtain the commander's concept of fire support and develop, with the commander and operations officer, the overall fire support plan.
2. Supervise and coordinate the development of the supporting arms plans to execute the overall fire support tasks.
3. Supervise the preparation of fire plans by resolving conflicts regarding selection of targets, assignment of fire support means, type and method of fire supporting, and timing or scheduling of missions or fires.
4. Review fire plans to ensure they can be implemented with the fire support means available and, if necessary, coordinate with the operations officer and commander to secure additional means or to modify plans.
5. Ensure chemical and conventional fires are fully coordinated.
6. Ensure unnecessary duplication of fires is eliminated.
7. Ensure plans of the various supporting arms are coordinated.
8. Ensure adequate fires are planned on targets and critical areas.
9. Ensure efficient use is made of all supporting arms.
10. Present the fire support plan to the commander.
11. Assist supporting arms representatives in selection of coordination measures and recommend them to the commander for approval.
12. Approve and institute airspace coordination areas and any plans for trajectory limitations to ensure the safety of aircraft and the coordination of the other supporting arms with air operations.
13. Obtain clearance and coordinate strikes or missions of supporting arms which might endanger or hinder the operations of an element of the amphibious task force.
14. Ensure the Fire Support Coordination Center (FSCC) receives and disseminates available target information to all staff sections and commands requiring the information.
15. Coordinate with the Target Information Officer (TIO) and the commander and his staff in the selection of targets and assignment of classification and attack priorities.
16. Maintain close liaison and working relations with the operations officer and the intelligence officer to ensure the most effective planning and application of fire support.
17. Ensure, in conjunction with the operations officer, timely and adequate warning of the delivery of chemical munitions is disseminated to all appropriate commands.
18. Ensure the situation map is maintained and necessary operational records of the Fire Support Coordination Center (FSCC) are kept.
19. Ensure the most effective means of attacking targets is used.
20. Ensure target classifications and attack priorities are correctly assigned.
21. Supervise the coordination of cross boundary fires.
22. Supervise the collection and dissemination of target data to include target lists and target bulletins. If your Fire Support Coordination Center (FSCC) is not the senior FSCC, submit a list of targets accordingly.
23. Transmit the necessary enemy information collected at the FSCC to all applicable artillery units.

- 24. Perform other command and liaison duties as directed by the commander.
- 25. Supervise the performance of those assigned to operate in the Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. ATP-4(D), Allied Spotting Procedures for Naval Gunfire Support
- 2. FM 6-20-30, Fire Support For Corps and Division
- 3. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 4. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 5. FM 6-30, Observed Fire Procedures
- 6. FMFM 5-1, Marine Aviation
- 7. FMFM 5-4, Offensive Air Support
- 8. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 9. MCWP 3-16.1, Marine Artillery Support
- 10. MCWP 3-16A, Targeting Process
- 11. MCWP 3-42.1, Fire Support in MAGTF Operations
- 12. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

TASK: 0802.04.09 (CORE PLUS) PREPARE A TARGET BULLETIN (TARBUL)

CONDITION(S): Given a target list, target cancellations, a list of targets destroyed, target additions, targets damaged, reactivated targets, corrections to existing target, a Fire Support Coordination Center (FSCC) with all equipment, and a blank Target Bulletin (TARBUL) format.

STANDARD(S): Per the references, ensuring accuracy and proper dissemination of the Target Bulletin (TARBUL).

PERFORMANCE STEPS:

- 1. Designate the first TARBUL as, "Target Bulletin One".
- 2. Designate the last TARBUL as, "Final Target Bulletin".
- 3. Annotate all additions, deletions, cancellations, changes, and updates.
- 4. Disseminate the TARBULs accordingly.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0802.04.10 (CORE PLUS) PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST

CONDITION(S): Given a Joint Tactical Air Strike Request (JTAR) for a preplanned mission 72 hours in advance, a fully operational Fire Support Coordination Center (FSCC), commander's guidance, references, and a higher echelon FSCC.

STANDARD(S): Per the references, ensuring accuracy.

PERFORMANCE STEPS:

1. Review the Joint Tactical Air Strike Request (JTAR) for accuracy and completeness.
2. Make liaison with the Air Officer, if possible.
3. Gain the Fire Support Coordinator's (FSC) approval prior to processing the Joint Tactical Air Strike Request (JTAR).
4. Forward the Joint Tactical Air Strike Request (JTAR) to the higher Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. FMFM 5-4, Offensive Air Support
2. FMFM 5-4A, Close Air Support and Close-In Fire Support
3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller

TASK: 0802.04.11 (CORE) DEVELOP A QUICK FIRE SUPPORT PLAN

CONDITION(S): Given a tactical situation where time limits preclude formal fire planning, communications with the Fire Direction Center (FDC) and Fire Support Coordination Center (FSCC), the commander's guidance, DA Form 5368-R (Quick Fire Plan), priority of fires, a minimum of five targets, knowledge of available fire support assets, order and timing of target engagement, duration of fires, references, H-hour, and a pencil.

STANDARD(S): Per the references and within 20 minutes.

PERFORMANCE STEPS:

1. Obtain the commander's guidance.
2. Complete DA Form 5368-R.
3. Issue situation report and warning order to the appropriate Fire Support Coordination Center (FSCC) and firing units.
4. Collect information on the availability and status of mortars, Field Artillery (FA), Naval Gunfire (NGF), and Close Air Support (CAS) to support the mission.
5. Select targets.
6. Obtain the commander's approval of the targets.
7. Complete and transmit the target list portion of DA Form 5368-R.
8. Schedule targets on DA Form 5368-R, per commander's guidance.
9. Transmit the schedules to the firing units.
10. Brief the observers.
11. Report to the commander when the firing units are ready.
12. Amend the plan, as necessary, based on the situation and the commander's desires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

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ENCLOSURE (3)

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0802.04.12 (CORE) INFORM SUPPORTED MANEUVER COMMANDER OF THE FIELD ARTILLERY'S TACTICAL MISSIONS AND CORRESPONDING PLAN TO SUPPORT THE SCHEME OF MANEUVER

CONDITION(S): Given the maneuver commander's guidance and/or the Operations Order (OPORDER), references, a fire support plan/matrix, the situation map, a target list, plotting equipment, communications with higher and lower Fire Support Coordination Centers (FSCCs), and the Direct Support (DS) artillery Fire Direction Center (FDC).

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Monitor the field artillery support plan.
2. Brief the supported unit on the filed artillery tactical mission.
3. Brief the supported unit on the field artillery support plan.
4. Brief target acquisition means to the commander.
5. Inform the supported unit of any changes or deviations resulting from combat development or the tactical situation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-20-30, Fire Support For Corps and Division
2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
3. FM 6-20-50, Fire Support For Brigade Operations (Light)
4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0802.04.13 (CORE PLUS) COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION

CONDITION(S): Given the situation map, plotting equipment, a situation overlay, a fire support status chart, a target list, a fully manned Fire Support Coordination Center (FSCC), references, and a Joint Tactical Air Strike Request (JTAR).

STANDARD(S): Per the references and in a timely manner.

PERFORMANCE STEPS:

1. Evaluate the use of other fire support systems, in lieu of the requested Close Air Support (CAS).
2. Determine and resolve potential air-space conflicts.
3. Coordinate the request with other fire support representatives, as requested.
4. Integrate the close air strike with indirect fire support assets.
5. Recommend appropriate safeguards and coordinating measures to provide safe and integrated employment.
6. Ensure the Joint Tactical Air Strike Request (JTAR) is properly completed and forward it to the appropriate agency.

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ENCLOSURE (3)

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. FMFM 5-4, Offensive Air Support
- 4. FMFM 5-4A, Close Air Support and Close-In Fire Support
- 5. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0802.04.14 (CORE) ADVISE THE MANEUVER COMMANDER ON EMPLOYMENT OF TARGET
AQUSITION ASSETS AVAILABLE, THEIR CAPABILITIES AND LIMITATIONS

CONDITION(S): Given the situation map, references, the visibility overlay, plotting
equipment, functioning Fire Support Coordination Center (FSCC), the maneuver commander’s
scheme of maneuver, the operations order, and the field artillery support plan.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine the available target acquisition assets.
- 2. Determine which assets are controlled by the commander and from which assets he
can request support.
- 3. Advise the maneuver commander on the capabilities and limitations of the target
acquisition assets available.
- 4. Advise the commander on employing or tasking target acquisition assets.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target
Acquisition
- 2. FM 6-20-30, Fire Support For Corps and Division
- 3. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 4. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 5. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0802.04.15 (CORE) PREPARE THE FIRE SUPPORT EXECUTION MATRIX

CONDITION(S): Given the maneuver commander’s guidance, the execution paragraph of the
OPORD, the target list, fire support requirements, fire support situation map, tactical
situation overlay, paper, plotting equipment, and the references.

STANDARD(S): Per the references, including all subordinate units and all phases of the
operation.

PERFORMANCE STEPS:

- 1. Construct the matrix.
- 2. Allocate fires and fire support tasks according to the scheme of maneuver and
the fire support plan.

3. Disseminate the completed matrix to all Forward Observer (FO) teams and other pertinent subordinate units.
4. Monitor the operation to ensure the plan in the matrix is implemented correctly and updated, as necessary.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 4. MCWP 3-16.1, Marine Artillery Support
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TASK: 0802.04.16 (CORE PLUS) PLAN FIRE SUPPORT FOR MARINE AIR GROUND TASK FORCE (MAGTF) OPERATIONS

CONDITION(S): Given fire support assets (organic, attached, and/or OPCON), commander's guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Analyze commander's guidance.
2. Determine High Value Targets (HVTs).
3. Develop the High Payoff Target List (HPTL).
4. Integrate organic, attached, and/or OPCON cueing assets per the High Payoff Target List (HPTL).
5. Integrate Marine Air Ground Task Force (MAGTF) fires plan with MAGTF recon-surveillance plan.
6. Allocate/apportion fire support assets (lethal and non-lethal/electronic attack).
7. Prepare the Attack Guidance Matrix (AGM).
8. Back-brief the commander.
9. Disseminate the plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

1. MCRP 3-16.6A, Joint Fires
2. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program
 2. 8500, Amphibious Warfare Distance Education Program (Phase I)
 3. 8600, Amphibious Warfare Distance Education Program (Phase II)
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DUTY AREA 05 - UNIT OPERATIONS

TASK: 0802.05.01 (CORE) DEVELOP AN ARTILLERY DECEPTION PLAN

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CONDITION(S): Given an Operations Order (OPORD), current intelligence summaries, a 1:50,000 map, a situation map, and required communications equipment.

STANDARD(S): Per the references, ensuring consonance between the plan and the tactical situation.

PERFORMANCE STEPS:

1. Evaluate the situation.
2. Develop courses of action.
3. Recommend a particular course of action considering the following:
 - a. Use of artillery simulators.
 - b. Use of dummy positions.
 - c. Use an artillery demonstration.
 - d. Use of roving guns.
 - e. Use of deceptive communications.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Capt

REFERENCE(S):

1. FM 100-5, Operations
 2. FM 90-2, Tactical Deception (How to Fight)
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TASK: 0802.05.02 (CORE PLUS) DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT

CONDITION(S): Given a battery that has just occupied a position, a partially completed defensive diagram, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select the appropriate course of action based upon the tactical scenario.
2. Establish the plan for the defense.
3. Supervise the execution of the defensive plan.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0335, Infantry Patrolling
2. 034, Landmine Warfare, Demolitions, and Breaching Operations
3. 0365, Anti-Armor Operations
4. 0368, The Heavy Machinegun Crewman
5. 0370, The Marine Rifleman: Combat Skills
6. 0372, The Marine Rifleman: Weapons
7. 0380, Infantry Squad Leader: Combat Leadership
8. 0382, Infantry Squad Leader: Weapons and Fire Support

- 9. 0816, Howitzer Section Chief
 - 10. 7400, Warfighting Skills Distance Education Program
-

TASK: 0802.05.03 (CORE) CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION

CONDITION(S): Given battery vehicles, weapons, a fully equipped advance party, a map, a compass, the reference, and the requirement to select and prepare the unit’s next position.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Plan for the reconnaissance.
- 2. Perform reconnaissance, using appropriate method(s).
- 3. Select position(s).
- 4. Occupy position(s) with the advance party.
- 5. Prepare position(s) for main body occupation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0332, Reconnaissance Marine
- 2. 0335, Infantry Patrolling
- 3. 034, Landmine Warfare, Demolitions, and Breaching Operations
- 4. 0365, Anti-Armor Operations
- 5. 0381, Land Navigation
- 6. 0385, Land Navigation (Web)
- 7. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare
-

TASK: 0802.05.04 (CORE) SUPERVISE A TACTICAL ROAD MARCH

CONDITION(S): Given the references and a scenario involving a unit with movement orders and an enemy employing a broad spectrum of air, ground, and target acquisition assets.

STANDARD(S): Per the references, demonstrating open and close column movement, tactical infiltration, and terrain marches.

PERFORMANCE STEPS:

- 1. Ensure the type of displacement, march column interval, and march column configuration maximizes passive and active defense measures.
- 2. Ensure the following:
 - a. The start point is crossed on time.

- b. A report is submitted to higher headquarters when crossing check points.
 - c. A release point is designated (if operating independently).
- 3. Cross release point on time.
- 4. Maintain march discipline.
- 5. Maintain proper convoy interval.
- 6. Execute appropriate immediate action drill when convoy comes under attack by air, ground, and /or artillery/rocket/missiles.
- 7. Organize march column so that dispersion of available automatic weapons provides for delivery of a heavy volume of fire against ground/air attacks in all directions.
- 8. Maintain 360 degree security while on the march with any available automatic weapons being mounted and assigned a sector of fire.
- 9. Prepare vehicles appropriately for convoy defense (e.g. canvas up, sand bagged, etc.).
- 10. At night, perform the above steps, as dictated by unit Standing Operating Procedures (SOP).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FMFM 4-9, Motor Transport
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 3503, Motor Transport NCO: Combat Operations
 - 2. 3530, Incidental Motor Vehicle Operator
 - 3. 3532, Incidental Motor Vehicle Operator (CD)
 - 4. 3538, Dispatching Procedures for Motor Transport
-

TASK: 0802.05.05 (CORE) SUPERVISE A BATTERY DISPLACEMENT

CONDITION(S): Given a warning order to displace, a compass, binoculars, a map, an emplaced battery, writing material, and a movement order.

STANDARD(S): Per the references, issuing the appropriate movement order.

PERFORMANCE STEPS:

- 1. Prepare for displacing a battery.
- 2. Organize and dispatch the advance party.
- 3. Issue the command, "PREPARE TO MARCH ORDER".
- 4. Develop the method of march (open column, close column, infiltration, or terrain march).
- 5. Plan for march column contingencies during displacement.
- 6. Issue the movement order. (NOTE: Format found in ST 6-50-20).
- 7. At night, perform the above steps, as dictated by unit Standing Operating Procedures (SOP).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

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REFERENCE(S):

- 1. FM 6-20-1 (HTF), Field Artillery Cannon Battalion
- 2. MCWP 3-16.3, Field Artillery Cannon Battery
- 3. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

TASK: 0802.05.06 (CORE) NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED

CONDITION(S): While mounted in a vehicle with cross-country capability and given a standard map of the area, a coordinate scale, a protractor, a vehicle with driver, and a compass.

STANDARD(S): Per the references, accurately directing the driver from a known point to a distant point using both terrain association and dead reckoning.

PERFORMANCE STEPS:

- 1. Determine affects of terrain on vehicle movement.
- 2. Determine affects of weather on vehicle movement.
- 3. Navigate by terrain association.
- 4. Navigate by dead reckoning.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 21-26, Map Reading and Land Navigation
- 2. FM 90-3 (HTF), Desert Operations (How To Fight)

DISTANCE LEARNING PRODUCT(S):

- 1. 0381, Land Navigation
- 2. 0385, Land Navigation (Web)

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

TASK: 0802.05.07 (CORE PLUS) SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING

CONDITION(S): Given commander's guidance, crew served weapons teams, appropriate equipment, references, and access to a training area or range.

STANDARD(S): Per the references, ensuring proficiency equivalent to that of a Marine with MOS 0331.

PERFORMANCE STEPS:

- 1. Observe battery crew served weapons training.
- 2. Provide guidance to the Local Security Chief on crew served weapons training.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FM 23-27, MK 19 40mm Grenade Machinegun Mod 3
- 2. FM 23-65, Browning Machine Gun, Caliber .50, HB M2

- 3. MCWP 3-15.1, Machinegun and Machinegun Gunnery
- 4. TM 08670A-10/1A, Operator’s Manual, Machinegun, 7.62mm, M240
- 5. TM 08670B-10/1, Supplement 1, M240G

DISTANCE LEARNING PRODUCT(S):

- 1. 0321, The M240G Machinegunner
- 2. 0368, The Heavy Machinegun Crewman
- 3. 0372, The Marine Rifleman: Weapons
- 4. 0382, Infantry Squad Leader: Weapons and Fire Support

ADMINISTRATIVE INSTRUCTIONS: NOTE: By training to a level of proficiency equivalent to that of a Marine of MOS 0331, the crew served weapon teams can train the rest of the Marines in the battery on the weapon system.

TASK: 0802.05.08 (CORE PLUS) SUPERVISE THE OPERATIONS OF A SURVEY SECTION

CONDITION(S): Given commander’s guidance, a tactical scenario, references, and a Survey Section.

STANDARD(S): Per the references, effectively supporting artillery operations.

PERFORMANCE STEPS:

- 1. Determine artillery positioning to support the maneuver commander’s scheme of maneuver.
- 2. Determine whether survey sections will operate in decentralized support of the cannon batteries or centralized support of the battalion.
- 3. Assign specific tasks to the Survey Section to ensure adequate support of the cannon batteries and attachments.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Capt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook
- 3. Laying Methods & Hasty Survey Methods

ADMINISTRATIVE INSTRUCTIONS: The Battalion S-3A / FDO directs the positioning of the battalion. Consultation with the Battalion Survey Officer is critical to effectively integrate the battalion’s survey requirements. The S-3A / FDO is responsible for knowing Survey Team locations at all teams and that this information is known throughout the COC.

DUTY AREA 06 - COMMUNICATIONS

TASK: 0802.06.01 (CORE) OPERATE FIRE SUPPORT COMMUNICATIONS SYSTEMS

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CONDITION(S): Given a company or battalion fire support (Artillery, Mortars, Naval Gunfire, and Air) net structure, and the references.

STANDARD(S): Per the references, utilizing the appropriate radio net to affect fire support.

PERFORMANCE STEPS:

1. Determine and use the appropriate net(s) at the company to affect fire support.
2. Determine and use the appropriate net(s) at the battalion to affect fire support.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. CEOI, Communications-Electronic Operating Instructions
2. FMFM 3-30, Communications
3. FMFM 6-3, Marine Battalion
4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
5. MCWP 3-11.1, Marine Rifle Company/Platoon (FMFM 6-4)
6. MCWP 3-16.1, Marine Artillery Support
7. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
2. 2532, HF/UHF Field Radio Equipment
3. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0802.06.02 (CORE) OPERATE AN ARTILLERY UNIT'S COMMUNICATION SYSTEM

CONDITION(S): Given an artillery battalion's (battery's) radio communication system in an FDC and the references.

STANDARD(S): Per the references, utilizing the appropriate radio net to affect fire support.

PERFORMANCE STEPS:

1. Determine and use the appropriate radio net to affect fire support at the cannon firing battery.
2. Determine and use the appropriate radio net to affect fire support at the battalion.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. CEOI, Communications-Electronic Operating Instructions
2. FMFM 3-30, Communications
3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
4. MCWP 3-16.1, Marine Artillery Support

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves

2. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0802.06.03 (CORE PLUS) CONSTRUCT AND REPAIR FIELD EXPEDIENT ANTENNA

CONDITION(S): Given an operational FM radio set with VHF frequency, a Communications-Electronic Operating Instruction Publication (CEOI), batteries, wire WD-1/TT and materials for construction, knife, measuring device, references, and a scenario involving an electronic warfare environment.

STANDARD(S): Per the references, effectively extending transmitting range, countering Radio Electronic Combat/Electronic Countermeasures (REC/ECM) by threat forces, and transmitting and receiving messages clearly.

PERFORMANCE STEPS:

1. Describe the components and characteristics of field expedient antennas.
2. Analyze the requirements for communications and select the appropriate antenna to perform the mission.
3. Construct a long wire (bi- or unidirectional) antenna, and transmit and receive radio messages from a radio.
4. Construct a vertical or horizontal dipole (1/2 wave) antenna, and transmit and receive radio messages using a radial.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. Battle Drill Guide (BDG) System Book Five A
2. FM 24-18, Communications Techniques

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
-

DUTY AREA 07 - OBSERVER DIGITAL TERMINAL (ODT)

TASK: 0802.07.01 (CORE) PREPARE THE OBSERVER DIGITAL TERMINAL (ODT) FOR OPERATION

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, ODT Job Aids, MCFSS Tab, references, and MCFSS Standing Operating Procedures (SOP).

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Power the Observer Digital Terminal (ODT).
2. Set Observer Digital Terminal (ODT) internal clock.
3. Load a Observer Digital Terminal (ODT) from another Observer Digital Terminal (ODT).
4. Run the digital observer program.
5. Set time.
6. Establish own name and address.
7. Set alarm and display parameters.
8. Set time of flight variable.
9. Set the conversion field in the Observer Digital Terminal (ODT).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0802.07.02 (CORE) ESTABLISH COMMUNICATIONS PARAMETERS WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, ODT Job Aids, MCFSS Standing Operating Procedures (SOP), and references.

STANDARD(S): Per the references, successfully entering all communications related data into the Observer Digital Terminal (ODT).

PERFORMANCE STEPS:

- 1. Enter SET COMM data.
- 2. Enter subscriber data.
- 3. Enter default destination.
- 4. Enter FIST destination.
- 5. Enter serial numbers.
- 6. Assign authentication code files.
- 7. Perform a SET/RESYNC.
- 8. Transmit a digital message.
- 9. Receive a digital message.
- 10. Re-establish resynchronization.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0802.07.03 (CORE) DETERMINE OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an operational Observer Digital Terminal (ODT), radios, encryption devices, ODT Job Aids, MCFSS Tab, MCFSS Standing Operating Procedures (SOP), a map, an M2 compass, two identifiable terrain features (visible and on the map), and the references.

STANDARD(S): Per the references, correctly utilizing all three available techniques.

PERFORMANCE STEPS:

- 1. Determine location by trilateration.
- 2. Determine location by triangulation.
- 3. Determine location by resection. (See Task 0861.01.11).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0802.07.04 (CORE) REPORT OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an operational Observer Digital Terminal (ODT), a map of the operational area, radios, encryption devices, MCFSS Tab, and references.

STANDARD(S): Accurately, per the references.

PERFORMANCE STEPS:

- 1. Enter grid location and altitude.
- 2. Enter the following laser related data:
 - a. Visibility.
 - b. GVLLD code.
 - c. Cloud height.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0802.07.05 (CORE) REPORT ENEMY ACTIVITY BY THE USE OF THE ATI MESSAGES WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, MCFSS Tab, and references.

STANDARD(S): Per the references, accurately utilizing the appropriate reporting message.

PERFORMANCE STEPS:

- 1. Input and send an ATI;GRID message.
- 2. Input and send an ATI;POLAR message.
- 3. Input and send an ATI;SHELREP message.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0802.07.06 (CORE) TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE OBSERVER DIGITAL TERMINAL (ODT)

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CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, references, and MCFSS Tab.

STANDARD(S): Per the references, accurately transmitting observer selected targets by use of the PLAN message.

PERFORMANCE STEPS:

1. Input the appropriate PLAN name into the PLAN message.
2. Input the appropriate Target number into the PLAN message.
3. Transmit targets to the appropriate agency.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
 2. ODT Job Aids
 3. ODT Operations Manual
-

TASK: 0802.07.07 (CORE) REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, references, and MCFSS Tab.

STANDARD(S): Per the references, accurately reporting the observer portion of the Forward Line Of Troops (FLOT).

PERFORMANCE STEPS:

1. Input the assigned point numbers.
2. Input the Forward Line Of Troops (FLOT) points grid locations.
3. Transmit to the appropriate agency.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
 2. ODT Job Aids
 3. ODT Operations Manual
-

TASK: 0802.07.08 (CORE) INPUT A TARGET IN THE KNOWN POINT FILE WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, references, and MCFSS Tab.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input the Known Point number into the file.
2. Input the grid location into the file.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0802.07.09 (CORE) VERIFY OBSERVER DIGITAL TERMINAL (ODT) INITIALIZATION

CONDITION(S): Given an operational Observer Digital Terminal (ODT), radios, encryption devices, MCFSS Tab, and references.

STANDARD(S): Per the references, ensuring Observer Digital Terminal (ODT) operability.

PERFORMANCE STEPS:

- 1. Verify all SETCOM parameters are entered correctly.
- 2. Verify the input of all INIT data.
- 3. Verify the Observer Digital Terminal (ODT) is setup to operate as a Battalion Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0802.07.10 (CORE) VERIFY OBSERVER DIGITAL TERMINAL (ODT) INPUT MESSAGES

CONDITION(S): Given an operational Observer Digital Terminal (ODT), radios, encryption devices, MCFSS Tab, and references.

STANDARD(S): Per the references, ensuring accuracy.

PERFORMANCE STEPS:

- 1. Verify the correct entry of the Forward Line Of Troops (FLOT) message.
- 2. Verify the correct entry of the OBLOC message.
- 3. Verify the correct entry of the ATI message.
- 4. Verify the correct entry of the FIREPLAN message.
- 5. Verify the correct entry of a target in the Known Point file.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

DUTY AREA 08 - MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS)

TASK: 0802.08.01 (CORE PLUS) BRIEF A MANEUVER COMMANDER ON AUTOMATED SYSTEM CAPABILITIES, LIMITATIONS, AND INTEROPERABILITY CHARACTERISTICS

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ENCLOSURE (3)

CONDITION(S): Given appropriate references, a task organization, and tactical scenario.

STANDARD(S): Per the references, ensuring the brief includes all pertinent information.

PERFORMANCE STEPS:

1. Explain the advantages of automated systems.
2. Explain the limitation of automated systems.
3. Explain the purpose of communications net architecture.
4. Explain how automated fire support systems enhance commander's intent and scheme of maneuver.
5. Explain how an over reliance on automated fire support systems detracts from supporting a scheme of maneuver.
6. Explain automated systems interoperability characteristics.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. BCT Job Aids
2. MCFSS SOP
3. ODT Job Aids
4. FC 6-40-2, Battery Computer System BCS Job Aids

TASK: 0802.08.02 (CORE PLUS) BRIEF A MANEUVER COMMANDER ON STANDARD MCFSS NET ARCHITECTURE

CONDITION(S): Given appropriate references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring the brief includes an explanation of the automated system communication parameters and net structure.

PERFORMANCE STEPS:

1. Explain the purpose of each communications net and associated subscribers in the MCFSS Standing Operating Procedures (SOP).
2. Explain the purposes of each digital communications parameter.
3. Explain the advantages and requirements of encrypted digital traffic.
4. Explain device and node responsibilities for mission processing.
5. Explain device and node responsibilities for battlefield information dissemination.
6. Explain device and node responsibilities for target processing and dissemination.
7. Explain device and node responsibilities for fire planning and dissemination.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. LCU Job Aids
2. MCFSS SOP
3. ODT Job Aids

- 4. FC 6-40-2, Battery Computer System BCS Job Aids
 - 5. MCWP 3-16.2, MCFSS Techniques and Procedures
-

TASK: 0802.08.03 (CORE PLUS) PLAN THE ALLOCATION OF AUTOMATED SUPPORT PARAMETERS

CONDITION(S): Given appropriate references, a task organization, and a tactical scenario.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Plan Division, Regiment, and Battalion zone point allocation.
- 2. Plan Forward Line Of Troops (FLOT) point allocation.
- 3. Plan FSCM allocation.
- 4. Plan Firefinder zones and parameters.
- 5. Plan the allocation of survey control point files.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. LCU Job Aids
 - 2. MCFSS SOP
 - 3. ODT Job Aids
 - 4. FC 6-40-2, Battery Computer System BCS Job Aids
-

TASK: 0802.08.04 (CORE PLUS) BRIEF A MANEUVER COMMANDER ON A MCFSS SITUATION REPORT AND ASSOCIATED AFU DATA

CONDITION(S): Given the references, a task organization, situation map, overlays, printouts, and tactical scenario.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Update and explain unit locations and firing capabilities.
- 2. Update and explain observer locations.
- 3. Update and explain ammunition reports.
- 4. Update and explain ammunition supply rates and associated warning reports.
- 5. Update and explain Mission Fired reports.
- 6. Explain registration files.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS SOP
- 4. MCWP 3-16.2, MCFSS Techniques and Procedures

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TASK: 0802.08.05 (CORE PLUS) DEVELOP THE AUTOMATED SYSTEM SOFTWARE SETTINGS AS PART OF A MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN

CONDITION(S): Given appropriate references, a task organization, and tactical scenario.

STANDARD(S): Per the references, ensuring the software settings support a maneuver commander's intent, focus of effort, and scheme of maneuver.

PERFORMANCE STEPS:

1. Develop mission prioritization parameters (target type, zone, shell).
2. Assign volley values to specific targets to ensure desired volume of fire is attained.
3. Assign effects values to specific targets to ensure desired volume of fire is attained.
4. Assign maxvol value to ensure desired massing is attained.
5. Exclude firing units to support desired use of fires.
6. Place fire units in desired order to ensure optimum use of firepower.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. LCU Job Aids
 2. MCFSS SOP
 3. ODT Job Aids
 4. FC 6-40-2, Battery Computer System BCS Job Aids
-

TASK: 0802.08.06 (CORE PLUS) BRIEF A MANEUVER COMMANDER ON THE COMMANDER'S CRITERIA PORTION OF THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN

CONDITION(S): Given appropriate references, a task organization, High Payoff Target List, Attack Guidance Matrix, and a tactical scenario.

STANDARD(S): Per the references, ensuring the brief explains how TFC software settings (Commander's Criteria) support a maneuver commander's intent, focus of effort, and scheme of maneuver.

PERFORMANCE STEPS:

1. Explain mission prioritization parameters (target type, zone, shell).
2. Explain how volley values assigned to specific target types ensure desired volume of fire is attained.
3. Explain how effects values assigned to specific target types ensure desired volume of fire is attained.
4. Explain how a maxvol value ensures desired massing is attained.
5. Explain exclusion of firing units supports use of fires.
6. Explain how fire unit ordering ensures optimum use of firepower.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. BCT Job Aids
2. LCU Job Aids

- 3. MCFSS SOP
- 4. MCWP 3-16.2, MCFSS Techniques and Procedures

TASK: 0802.08.07 (CORE PLUS) BRIEF A MANEUVER COMMANDER ON THE MISSION PROCESSING SEQUENCE

CONDITION(S): Given appropriate references, a task organization, and a tactical scenario.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Explain the Fire Support Coordination Center (FSCC) approval mode.
- 2. Explain Centralized Mission Processing mode.
- 3. Explain Autonomous Mission Processing mode.
- 4. Explain the content of the reports generated by each Mission Processing mode.
- 5. Determine and assign best mode for a tactical situation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. LCU Job Aids
- 2. MCFSS SOP
- 3. ODT Job Aids
- 4. FC 6-40-2, Battery Computer System BCS Job Aids
- 5. MCWP 3-16.2, MCFSS Techniques and Procedures

TASK: 0802.08.08 (CORE) DEVELOP ATI CRITERIA AS PART OF THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN

CONDITION(S): Given appropriate references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring the criteria supports targeting and counterfire functions in a tactical scenario.

PERFORMANCE STEPS:

- 1. Determine best mode for radar employment to support the tactical scenario.
- 2. Determine radar zones to support the tactical scenario.
- 3. Determine desired ATI;FMMOD values to generate a fire mission based on target traffic.
- 4. Determine ATI;TBMOD value to generate desired amount of target buildup reports.
- 5. Determine ATI;SVMOD values to generate desired output of combination and inspection reports.
- 6. Determine if any target dissemination measures need to be developed to improve targeting process.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

- 1. MCFSS SOP

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ENCLOSURE (3)

2. ODT Job Aids
 3. FC 6-40-2, Battery Computer System BCS Job Aids
 4. MCWP 3-16.2, MCFSS Techniques and Procedures
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TASK: 0802.08.09 (CORE) ADVISE A MANEUVER COMMANDER ON THE ATI CRITERIA CONTAINED WITHIN THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN

CONDITION(S): Given the references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring the advice supports targeting and counterfire functions in the tactical scenario.

PERFORMANCE STEPS:

1. Explain best mode for radar employment to support the tactical scenario.
2. Explain radar zones to support the tactical scenario.
3. Explain desired ATI;FMMOD values to generate a fire mission based on target traffic.
4. Explain ATI;TBMOD values to generate desired amount of target buildup reports.
5. Explain ATI;SVMOD values to generate desired output of combination and inspection reports.
6. Explain if any target dissemination measures need to be developed to improve targeting process.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS SOP
 3. ODT Job Aids
 4. FC 6-40-2, Battery Computer System BCS Job Aids
 5. MCWP 3-16.2, MCFSS Techniques and Procedures
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TASK: 0802.08.10 (CORE) DEVELOP FIRE PLANNING CRITERIA AS PART OF THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN

CONDITION(S): Given the references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring the criteria supports the tactical scenario.

PERFORMANCE STEPS:

1. Assign volley values to specific target types to ensure desired volume of fire is attained.
2. Assign effects values to specific target types to ensure desired volume of fire is attained.
3. Assign maxvol value to ensure desired massing is attained.
4. Exclude fire units to ensure a scheme of maneuver is supported within its fire plan.
5. Order fire units to ensure fires are sequenced to support a scheme of maneuver.
6. Develop guidance to ensure targets within a fire plan are phased to support a scheme of maneuver.

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ENCLOSURE (3)

- 7. Develop guidance for the management and prioritization of targets.
- 8. Develop instructions for targets within a fire plan to support its scheme of maneuver.
- 9. Ensure computed schedule supports its scheme of maneuver.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS SOP
- 3. ODT Job Aids
- 4. FC 6-40-2, Battery Computer System BCS Job Aids
- 5. MCWP 3-16.2, MCFSS Techniques and Procedures

TASK: 0802.08.11 (CORE) ADVISE A MANEUVER COMMANDER ON THE FIRE PLANNING CRITERIA CONTAINED WITHIN THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN

CONDITION(S): Given the references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring the advice explains how automated systems settings support the Commander's intent, focus of effort, and scheme of maneuver.

PERFORMANCE STEPS:

- 1. Explain how assigned volley values to specific target types ensure desired volume of fire is attained within a fire plan.
- 2. Explain how assigned effects values to specific target types ensure desired volume of fire is attained.
- 3. Explain how assigned maxvol value ensures desired massing is attained.
- 4. Explain how excluding fire units ensure support for a scheme of maneuver.
- 5. Explain how ordering fire units ensure fires are sequenced to support a scheme of maneuver.
- 6. Explain how the phasing of targets within a fire plan supports a scheme of maneuver.
- 7. Explain the management and prioritization of targets within a fire plan.
- 8. Explain how instruction for targets supports a scheme of maneuver.
- 9. Explain how a computed schedule supports its scheme of maneuver.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS SOP
- 3. ODT Job Aids
- 4. FC 6-40-2, Battery Computer System BCS Job Aids
- 5. MCWP 3-16.2, MCFSS Techniques and Procedures

TASK: 0802.08.12 (CORE) INTEGRATE THE MCFSS ENCLOSURE WITHIN AN ARTILLERY FIRES PLAN

CONDITION(S): Given the references, a task organization, and a tactical scenario.

Annex I to
Appendix F to
ENCLOSURE (3)

STANDARD(S): Per the references, ensuring the automated system settings provide optimum fire support to a scheme of maneuver.

PERFORMANCE STEPS:

1. Ensure communications settings and related modification support task organization, tactical missions, and scheme of maneuver.
2. Ensure Mission Processing mode and Commander's Criteria settings support intent.
3. Ensure ATI criteria support commander's intent.
4. Ensure Fire Planning values support commander's intent.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS SOP
 3. FC 6-40-2, Battery Computer System BCS Job Aids
 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 5. MCWP 3-16.1, Marine Artillery Support
 6. MCWP 3-16.2, MCFSS Techniques and Procedures
 7. MCWP 5-1, Command and Staff Action
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TASK: 0802.08.13 (CORE) PLAN MODIFICATIONS TO STANDARD MCFSS NET ARCHITECTURE TO SUPPORT A CHANGE IN TASK ORGANIZATION AND/OR ARTILLERY TACTICAL MISSION

CONDITION(S): Given the references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring connectivity.

PERFORMANCE STEPS:

1. Determine specific change to task organization and/or tactical mission.
2. Plan modifications to net architecture to ensure connectivity.
3. Plan modifications to communications parameters to ensure connectivity.
4. Ensure modifications support change in task organization and/or artillery tactical mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS SOP
 3. ODT Job Aids
 4. FC 6-40-2, Battery Computer System BCS Job Aids
 5. MCWP 3-16.2, MCFSS Techniques and Procedures
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TASK: 0802.08.14 (CORE) PLAN THE EXECUTION OF JUMP OPERATIONS WITHIN AN AMPHIBIOUS SCENARIO

CONDITION(S): Given the references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring the plan integrates movement of command cells within an amphibious scenario.

PERFORMANCE STEPS:

1. Determine movement and positioning requirements of command cells.
2. Determine where communication links will be degraded.
3. Develop a plan to jump command cells.
4. Develop guidance on changes to communications parameters and net architecture to ensure connectivity is maintained.
5. Ensure back up plan is available to maintain connectivity.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS SOP
 3. ODT Job Aids
 4. FC 6-40-2, Battery Computer System BCS Job Aids
 5. MCWP 3-16.2, MCFSS Techniques and Procedures
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TASK: 0802.08.15 (CORE) PLAN THE ALLOCATION OF RESOURCES TO SUSTAIN MCFSS TRAINING

CONDITION(S): Given the references, a task organization, and a tactical scenario.

STANDARD(S): Per the references, ensuring MCFSS is integrated within unit operations.

PERFORMANCE STEPS:

1. Determine unit's MCFSS training requirements.
2. Determine available unit training resources.
3. Allocate training resources.
4. Monitor performance of MCFSS training to ensure it succeeds.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Capt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS SOP
 3. ODT Job Aids
 4. FC 6-40-2, Battery Computer System BCS Job Aids
 5. MCWP 3-16.2, MCFSS Techniques and Procedures
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DUTY AREA 09 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS)

TASK: 0802.09.01 (CORE PLUS) DIRECT THE ESTABLISHMENT OF A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a single station Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

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ENCLOSURE (3)

PERFORMANCE STEPS:

1. Configure a single workstation Operational Facility (OPFAC).
2. Power a single workstation Operational Facility (OPFAC).
3. Login at Defense Infrastructure Information Common Operating Environment (DII COE).
4. Start AFATDS.
5. Restore database.
6. Ensure validity of unit configuration window.
7. Replace default database.
8. Activate Operational Facility (OPFAC).
9. Configure printer.
10. Load V-MAP (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.02 (CORE PLUS) DIRECT THE ESTABLISHMENT OF A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a multi-workstation Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Configure a multi-workstation OPFAC.
2. Power a multi-workstation OPFAC.
3. Change machine ID, if required.
4. Login at DII COE.
5. Start AFATDS at master.
6. Enter multi-workstation OPFAC name.
7. Start AFATDS at slave(s).
8. Enter multi-workstation OPFAC name at slave(s).
9. Restore database at the master.
10. Ensure validity of unit configuration window.
11. Replace default database.
12. Activate master workstation.
13. Configure printer(s).

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ENCLOSURE (3)

- 14. Associate assignments to workstations.
- 15. Load V-Maps (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.03 (CORE PLUS) DIRECT EXIT PROCEDURES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Exit AFATDS at specific workstations within an Operational Facility (OPFAC).
- 2. Exit AFATDS for an entire Operational Facility (OPFAC).
- 3. Exit AFATDS for an Operational Facility (OPFAC) at a specific time.
- 4. Exit a user account.
- 5. Shutdown hardware at an Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.04 (CORE PLUS) PLAN A COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine required connectivity.
- 2. Determine the networks required.
- 3. Check the routes, based on device limitations, and assign net setting parameters.
- 4. Check fire mission routes.
- 5. Assign addresses.
- 6. Build the enclosure to TAB J.

7. Determine the protocols to be used.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.05 (CORE PLUS) PLAN A DATA DISTRIBUTION SCHEME

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Decide what information is required.
2. Determine the routes for information.
3. Using the routes, determine what lists must exist.
4. Using the routes and lists, determine what criteria must exist.
5. Compare the requirements to the default data distribution.
6. Build additional lists to provide required distribution.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.06 (CORE PLUS) SUPERVISE THE ENTRY OF A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter configuration name.
2. Enter network parameters.
3. Enter destination stations.
4. Enter routing data.
5. Perform functions from the COMM Configuration Menu.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.07 (CORE PLUS) SUPERVISE THE IMPLEMENTATION OF A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC) with a planned communications configuration entered, operations order, and references.

STANDARD(S): Per the references, ensuring successful message transmission.

PERFORMANCE STEPS:

- 1. Select the planned configuration as new current.
- 2. Associate channels to communication networks.
- 3. Turn on all nets.
- 4. Transmit test messages.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.08 (CORE PLUS) SUPERVISE THE ENTRY OF THE DISTRIBUTION DATA

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Assign units to distribution lists.
- 2. Enter distribution list criteria.
- 3. Execute distribution list functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.09 (CORE PLUS) SUPERVISE AFATDS DATABASE INPUT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, tactical situation, geometry data, meteorological data, logistical data, and the references.

STANDARD(S): Per the references, ensuring accurate input of data.

PERFORMANCE STEPS:

- 1. Enter unit data.
- 2. Enter geometry.
- 3. Enter meteorological data.
- 4. Enter unit logistical data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.10 (CORE PLUS) ESTABLISH TARGET GUIDANCE

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander’s guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target selection standards.
- 2. Enter high value target list data.
- 3. Enter Target Management Matrix (TMM) data.
- 4. Enter mission prioritization data.
- 5. Enter mission routing data.
- 6. Enter special target allocation data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.11 (CORE PLUS) ESTABLISH FIRE SUPPORT ATTACK GUIDANCE

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, FS attack guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter air attack methods.
- 2. Enter NSFS attack methods.
- 3. Enter mortar attack methods.
- 4. Enter mortar restrictions.
- 5. Enter mortar immediate attack methods.
- 6. Enter aviation attack methods.
- 7. Enter system attack perimeters.
- 8. Enter munitions restrictions.
- 9. Enter system tasks list data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.12 (CORE PLUS) ESTABLISH UNIT AND SENSOR GUIDANCE

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter CSR guidance.
- 2. Enter reporting guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.13 (CORE PLUS) ESTABLISH FIELD ARTILLERY ATTACK GUIDANCE

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Field Artillery (FA) attack guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Field Artillery (FA) preference table.
- 2. Enter Field Artillery (FA) cannon attack method.

- 3. Enter Field Artillery (FA) restriction.
- 4. Enter Field Artillery (FA) immediate attack method.
- 5. Enter rocket/missile attack methods.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.14 (CORE PLUS) ESTABLISH COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCE

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, C3 guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter meteorological guidance.
- 2. Enter movement guidance.
- 3. Enter survey guidance.
- 4. Enter MLRS guidance.
- 5. Enter FDS guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.15 (CORE PLUS) ESTABLISH MISCELLANEOUS GUIDANCE

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, miscellaneous guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter CONOPS guidance.
- 2. Enter target decay time guidance.
- 3. Enter target duplication guidance.
- 4. Enter FS system buffer distance guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.16 (CORE PLUS) DIRECT ESTABLISHMENT OF INTERVENTION POINT DATA

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter mission precedence criteria.
2. Enter battle area criteria.
3. Enter mission type criteria.
4. Enter target type criteria.
5. Enter target filter criteria.
6. Enter analysis result criteria.
7. Enter attack option criteria.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.17 (CORE PLUS) SUPERVISE TARGET REPORT PROCESSING

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter target block number allocation.
2. Perform target file maintenance (target lists, duplicates, coordination).
3. Process target indicator data.
4. Process suspect target data.
5. Initiate a fire mission.
6. Perform target process functions (find target, fire target, cancel RAT, End of Mission (EOM), checkfiring).
7. Enter ASR number block.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.18 (CORE PLUS) SUPERVISE FIRE REQUEST PROCESSING

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, fire request, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Perform fire mission file maintenance (active mission monitor, MFR monitor, active fire mission window, End of Mission (EOM), RAT).
2. Perform munition calculation procedures.
3. Reprocess a fire request.
4. Process a clearance request.
5. Process a coordination request.
6. Direct processing of missions requiring additional information.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.19 (CORE PLUS) DEVELOP A SCHEDULE OF FIRES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, target list, commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter target groups.
2. Enter series.
3. Enter a fire plan.
4. Transmit a fire plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.20 (CORE PLUS) SUPERVISE THE IMPLEMENTATION OF A PLANNED SITUATION INTO CURRENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, plan, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Edit unit locations.
- 2. Edit the fire plan.
- 3. Recompute schedule of fires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.21 (CORE PLUS) PLAN UNIT MOVEMENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter movement guidance.
- 2. Enter movement factors.
- 3. Build a movement overlay.
- 4. Establish routes.
- 5. Establish a move.
- 6. Deconflict unit moves.
- 7. Request move approval.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.22 (CORE PLUS) PLAN CONTINUITY OF OPERATIONS (CONOPS)

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Continuity of Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter Continuity of Operations (CONOPS) guidance.
2. Transmit Continuity of Operations (CONOPS) guidance and associated BASIC/General Unit data.
3. Enable/disable MFR/Inactive target purge.
4. Update communication configuration.
5. Transmit Continuity of Operations (CONOPS) notification.
6. Activate backup Operational Facilities (OPFACs).
7. Activate satellite Operational Facilities (OPFACs).
8. Clear principle Operational Facilities (OPFAC) mission interventions.
9. Transmit Continuity of Operations (CONOPS) ready message.
10. Activate Continuity of Operations (CONOPS) guidance.
11. Process Continuity of Operations (CONOPS) activation messages.
12. Transmit active target list to backup Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0802.09.23 (CORE PLUS) SUPERVISE CONTINUITY OF OPERATIONS (CONOPS) EXECUTION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Continuity of Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter Continuity of Operations (CONOPS) guidance.
2. Transmit Continuity of Operations (CONOPS) guidance and associated BASIC/General Unit data.
3. Enable/disable MFR/Inactive target purge.
4. Update communication configuration.
5. Transmit Continuity of Operations (CONOPS) notification.
6. Activate backup Operational Facilities (OPFACs).
7. Activate satellite Operational Facilities (OPFACs).

8. Clear principle Operational Facility (OPFAC) mission interventions.
9. Transmit Continuity of Operations (CONOPS) ready message.
10. Activate Continuity of Operations (CONOPS) guidance.
11. Process Continuity of Operations (CONOPS) activation messages.
12. Transmit active target list to backup Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.24 (CORE PLUS) DIRECT THE CREATION OF A TRIGGER EVENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander's guidance, a tripped trigger event, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Direct the establishment of a trigger event rule.
2. Direct the establishment of a trigger function.
3. Direct the establishment of a trigger event state.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0802.09.25 (CORE PLUS) DIRECT ACTIONS TAKEN ON A TRIGGERED EVENT BEING TRIPPED

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander's guidance, a tripped trigger event, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Direct the implementation of the prescribed actions.
2. Direct the actions on automatically generated functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 1stLt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

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2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)

3. TB-11-7025-297-10, AFATDS Operators Notebook

DUTY AREA 10 - MAINTENANCE

TASK: 0802.10.01 (CORE) DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT

CONDITION(S): Given maintenance management directives, artillery unit maintenance management personnel, artillery Daily Process Report (DPR), Equipment Repair Order (ERO), Equipment Repair Order Shopping List (EROSL), LM2 Report, T/O cover letter, T/E, Publications Listing (PL), and references.

STANDARD(S): Per the references, ensuring the serviceability of unit equipment.

PERFORMANCE STEPS:

1. Ensure proper maintenance is performed at each echelon.
 - a. Preventative.
 - b. Scheduled.
 - c. Corrective.
2. Ensure maintenance records are maintained and current.
3. Ensure use of maintenance management forms for the requisition of repair parts.
4. Ensure the technical skills of personnel are commensurate with unit's echelon of repair and equipment allowances.
5. Manage MIMMS/SASSY interface for the artillery unit.
 - a. Review Daily Process Report (DPR) for status of equipment.
 - b. Review LM2 reports.
6. Review and update PL. (Coordinate with the S-1.)
7. Inspect maintenance management program ensuring adherence to applicable directives.
8. Conduct inspections to determine adequacy of maintenance program.
9. Review and inspect calibration program established by the MMO.
10. Review and inspect modification program established by the MMO.
11. Review and inspect tool control procedures established by the MMO.
12. Review and inspect publication control procedures established by the S-1.
13. Review Daily Process Report (DPR)/Equipment Repair Order (ERO)/Equipment Repair Order Shopping List (EROSL) with the MMO.
14. Ensure parts required for equipment maintenance match parts actually on order.
15. Review status of parts on order.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. FMFRP 4-15, Commanders Guide to Maintenance
2. MCO P4790.1B, Marine Corps Integrated Maintenance Management System Introduction

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- 3. MCO P4790.2B, MIMMS Field Procedures Manual
- 4. MCO P5215.17, The USMC Tech Pub System
- 5. MCO P5600.31, Marine Corps Publications and Printing Regulations
- 6. NAVMC 2761, Catalog of Publications
- 7. TM 4700-15/1, Equipment Record Procedures
- 8. UM 4400-124, FMF SASSY Using Unit Procedures
- 9. UM 4790-5, MIMMS (AIS) FMSS

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System
- 4. 1320, Fundamentals of Diesel Engines (Web)
- 5. 1330, Basic Shop Fundamentals for the Mechanic
- 6. 1334, Diesel Engine Maintenance
- 7. 1335, Fundamentals of Diesel Engines
- 8. 3580, Automotive Engine Maintenance and Repair

DUTY AREA 11 - LOGISTICS/SUPPLY/COMBAT SERVICE SUPPORT

TASK: 0802.11.01 (CORE PLUS) COORDINATE LOGISTICS

CONDITION(S): Given references, materials, equipment, and while conducting tactical operations.

STANDARD(S): Per the references, ensuring that the artillery unit is adequately supported.

PERFORMANCE STEPS:

- 1. Adhere to logistics and maintenance management Standing Operating Procedures (SOPs).
- 2. Consider the logistics functions in the development of tactical plans.
- 3. Include attached elements in all logistical planning.
- 4. Comply with basic loads established by higher headquarters.
- 5. Maintain dispersion between materiel and ammunition within positions.
- 6. Submit logistics reports, as required.
- 7. Conduct PM and CM in a field environment.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. FMFM 4-1, Combat Service Support Operations
- 2. MCWP 3-16.1E, Combat Service Support for Artillery Units

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)

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- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 045, The Logistics/Embarkation Specialist
- 4. 047, Introduction to Amphibious Embarkation

TASK: 0802.11.02 (CORE PLUS) MAINTAIN CLASS V SMALL-ARMS AMMO BASIC LOAD AND SUPPLIES

CONDITION(S): Given the appropriate small arms ammunition and the references.

STANDARD(S): Per the references, maintaining the Required Supply Rate (RSR) and Basic Load (BL).

PERFORMANCE STEPS:

- 1. Adhere to established Standing Operating Procedures (SOPs).
- 2. Ensure small arms Basic Load (BL) is maintained for all equipment.
- 3. Forecast and submit requisitions to maintain the Required Supply Rate (RSR).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCO 8010.1E, Class V Planning Factors for Fleet Marine Force Combat Operations
- 2. MCWP 3-16.1E, Combat Service Support for Artillery Units

TASK: 0802.11.03 (CORE PLUS) SUPERVISE THE PICKUP AND DELIVERY OF DESIGNATED CLASSES OF SUPPLY

CONDITION(S): Given the references and supplies that require distribution from battalion and other issue points to battery elements.

STANDARD(S): Per the references, ensuring the proper supplies are delivered and issued to the correct units in a secure and timely manner.

PERFORMANCE STEPS:

- 1. Obtain supplies from authorized sources.
- 2. Maintain appropriate security to prevent loss, damage, or theft.
- 3. Ensure timely schedule of delivery to minimize the probability of contamination or spoilage.
- 4. Make delivery to proper battery elements, as directed by requisitions.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. MCWP 3-16.1E, Combat Service Support for Artillery Units

DUTY AREA 12 - NBC DEFENSE OPERATIONS

TASK: 0802.12.01 (CORE PLUS) DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA

CONDITION(S): Given an artillery unit, a requirement from higher headquarters to cross a radiologically contaminated area, an NBC 5 Report or a contamination overlay, a tactical map, radiacmeter(s) with operator(s), commander established Operational Exposure Guidance (OEG), and the references.

STANDARD(S): Per the references, ensuring the least possible contamination to personnel and equipment.

PERFORMANCE STEPS:

1. Use NBC 5 report or contamination overlay to plot hazard area on map.
2. Determine best route.
3. Provide advance party or reconnaissance team with turnback dose and OEG and send them ahead to reconnoiter.
4. Provide additional shielding to vehicles, if possible.
5. Provide personnel with as much protection from dust as possible.
6. Guide unit across contaminated area while employing contamination avoidance techniques.
7. Conduct radiological monitoring.
8. Ensure Operational Exposure Guidance (OEG) is not exceeded.
9. Determine level of contamination after clearing contaminated area.
10. Establish decontamination priorities and perform decontamination.
11. Report total dose information to higher headquarters.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

REFERENCE(S):

1. FM 3-100, NBC Operations
2. FM 3-3, NBC Contamination Avoidance
3. FM 3-4, NBC Protection
4. FM 3-5, NBC Decontamination

DISTANCE LEARNING PRODUCT(S):

1. 571, NBC Individual Survival Measures
2. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

1. Chemical Warfare

TASK: 0802.12.02 (CORE PLUS) SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT

CONDITION(S): Given an artillery unit, the requirement for hasty decontamination (MOPP gear exchange and vehicle washdown), appropriate materiel, and the references.

STANDARD(S): Per the references, ensuring all possible liquid or solid contamination is removed from personnel and gross contamination is removed from equipment.

PERFORMANCE STEPS:

1. Select hasty decontamination site.
2. Supervise preparation of hasty decontamination site.
3. Supervise MOPP gear exchange.
4. Supervise vehicle washdown.

5. Reduce MOPP level, if warranted.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

REFERENCE(S):

1. FM 3-5, NBC Decontamination
2. MCIO P1500.44C, Battle Skills Training/Essential Skills Handbook

DISTANCE LEARNING PRODUCT(S):

1. 5710, NBC Decontamination Team Procedures

PERFORMANCE SUPPORT TOOL(S):

1. Chemical Warfare
-

TASK: 0802.12.03 (CORE PLUS) SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT

CONDITION(S): Given an artillery unit, the requirement to conduct deliberate decontamination (detailed troop decontamination and detailed equipment decontamination), appropriate materiel, and the references.

STANDARD(S): Per the references, ensuring the contamination on personnel and equipment is below the negligible risk level.

PERFORMANCE STEPS:

1. Coordinate with decontamination team leader regarding time of arrival, supplies, equipment, personnel support to be furnished by the contaminated unit, and estimated time of completion.
2. Request route clearance to deliberate decontamination site assembly area.
3. Send advance party to site with personnel to augment decontamination team.
4. Direct unit movement of main body to assembly area and organize for decontamination.
5. Ensure all personnel are familiar with the contamination control lines.
6. Begin vehicle/equipment decontamination.
7. Begin personnel decontamination.
 - a. Station 1: Individual gear decontamination.
 - b. Station 2: Overboot and hood decontamination.
 - c. Station 3: Overgarment removal.
 - d. Station 4: Overboot and glove removal.
 - e. Station 5: Monitor for contamination on personnel.
 - f. Station 6: Mask removal.
 - g. Station 7: Mask decontamination.
 - h. Station 8: Reissue of clean equipment/gear to each individual.
8. Reorganize unit in a clean area upwind of decontamination site.
9. Adjust MOPP level, as appropriate, and resume mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

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REFERENCE(S):

- 1. FM 3-5, NBC Decontamination

DISTANCE LEARNING PRODUCT(S):

- 1. 5710, NBC Decontamination Team Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare

ADMINISTRATIVE INSTRUCTIONS: Training. Water should be used vice DS2 for training evolution.

TASK: 0802.12.04 (CORE PLUS) SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR NUCLEAR ATTACK

CONDITION(S): Given an artillery unit, a unit mission, a warning of an impending nuclear attack, a tactical situation, and the references.

STANDARD(S): Per the references, ensuring the unit equipment is hardened to withstand a nuclear attack making maximum use of terrain masking features and passive defense measures.

PERFORMANCE STEPS:

- 1. Identify backup command and control procedures.
- 2. Alert any other units in area.
- 3. Remove any food, water, ammunition, etc., stored outside and place it inside a hardened area, if possible.
- 4. Remove antennas and any other electronic equipment, if applicable, and store inside the vehicle or other hardened location.
- 5. Direct all sections to secure all loose gear.
- 6. Position howitzers, if possible, so that muzzles are oriented directly away from expected direction of blast. Unlock brakes and ensure transmission, if applicable, is in neutral.
- 7. Ensure all hatches and outside accesses are closed, dogged, and sealed.
- 8. If situation permits, leave the area of the imminent blast as quickly as possible. Otherwise, continue mission.
- 9. If situation will not permit leaving the area, try to harden the gun positions as much as possible.
- 10. If situation permits, move howitzers and other vehicles into gulleys, in rock outcroppings, hillside areas, etc.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

REFERENCE(S):

- 1. FM 3-100, NBC Operations
- 2. FM 3-3, NBC Contamination Avoidance
- 3. FM 3-4, NBC Protection

DISTANCE LEARNING PRODUCT(S):

- 1. 571, NBC Individual Survival Measures
- 2. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

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DUTY AREA 13 - EMBARKATION

TASK: 0802.13.01 (CORE PLUS) SUPERVISE EMBARKATION

CONDITION(S): Given an artillery unit designated as a landing element of a larger force, available shipping, and the references.

STANDARD(S): Per the references, ensuring all materiel and personnel are moved to the Point of Embarkation (POE).

PERFORMANCE STEPS:

1. Coordinate with the Marine Air Ground Task Force (MAGTF) Ground Combat Element (GCE) embarkation officer, and other embarkation officers/movement control officers, as appropriate.
2. Determine the unit's transportation lift requirements.
3. Ensure all material is properly marked, packaged, manifested, and loaded for embarkation.
4. Conduct embarkation inspections.
5. Prepare and execute embarkation/movement plans.
6. Provide security for materiel during embarkation.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: 2ndLt

REFERENCE(S):

1. CFR-46, Shipping
2. CFR-49, Transportation
3. FMFM 4, Combat Service Support
4. FMFM 4-6, Air Movement of FMF Units
5. FMFM 4-9, Motor Transport
6. LFM 03, Amphibious Embarkation
7. NAVSEA OP 4, Ammunition Afloat
8. OH 4-1, Combat Service Support Operations

DISTANCE LEARNING PRODUCT(S):

1. 045, The Logistics/Embarkation Specialist
2. 047, Introduction to Amphibious Embarkation

DUTY AREA 14 - PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)

TASK: 0802.14.01 (CORE) SUPERVISE THE PERFORMANCE OF THE SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference, ensuring proper setup sequence.

PERFORMANCE STEPS:

1. Adjust the display backlighting.
2. Display the keypad map.

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- 3. Perform the PLGR self test.
- 4. Select an operating mode and SV type.
- 5. Setup units of measurement.
- 6. Select magnetic variation.
- 7. Select elevation hold, time, and error formats.
- 8. Select a horizontal datum.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0802.14.02 (CORE) SUPERVISE THE CHANGE OF THE MEMORY BATTERY

CONDITION(S): Given a PLGR with a DC power supply and the reference.

STANDARD(S): Per the reference, ensuring proper procedures are followed.

PERFORMANCE STEPS:

- 1. Ensure the differences between the memory battery and a standard AA battery are identified.
- 2. Explain the consequences of improperly changing the memory battery or of allowing the memory battery to die.
- 3. Ensure the procedures for changing the memory battery are properly followed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0802.14.03 (CORE) SUPERVISE THE PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference.

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PERFORMANCE STEPS:

1. Review the reference.
2. Ensure the proper procedures for performing an Emergency Zeroize are employed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS:

1. Safety: The BA-5800 lithium battery is dangerous if mishandled.
 2. The Marine is not required to perform the zeroize for evaluation purposes.
-

TASK: 0802.14.04 (CORE) VERIFY ERRORS CAUSING PLGR WARNING DISPLAYS

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference, ensuring the error is identified and the corresponding corrective action is implemented.

PERFORMANCE STEPS:

1. Identify the error and take corrective action for the following warnings:
 - a. "Low Memory Battery".
 - b. "Low Primary Battery".
 - c. "External Power Lost".
 - d. "External Antenna Lost".
 - e. "External Antenna Fault".
 - f. "Emergency Zeroize Passed".
 - g. "Emergency Zeroize Failed".
 - h. "Invalid Key Entered".
 - i. "Bad Key Detected".
 - j. "No Key For Tomorrow".
 - k. "Not Enough Keys for Mis Dur".
 - l. "Too Many Keys For Mis Dur".
 - m. "Check GUV Issue Number".
 - n. "Insufficient Y-code SVs".
 - o. "Possible Spoofers".
 - p. "Zeroized Failed".
 - q. "All Keys Zeroized".

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INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0802.14.05 (CORE) SUPERVISE THE PERFORMANCE OF NAVIGATION PROCEDURES WITH THE AN-PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply, 1:50,000 scale mapsheet of the area, a trig list and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Enter the grid to which you are going.
- 2. Place the PLGR into the 2Dfast mode.
- 3. Navigate to a location in the 2Dfast mode.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS:

- 1. Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0802.14.06 (CORE) VERIFY THE DETERMINATION OF A POSITION IN THE AVERAGING MODE

CONDITION(S): Given a PLGR with a power supply, an area free of signal masks, a 1:50,000 scale mapsheet, and the reference.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
- 2. Select the SETUP option on the MENU screens.
- 3. Change the setup mode to CONT.
- 4. Verify the horizontal datum and vertical datum selected in the PLGR against the mapsheet.
- 5. Ensure the Almanac Age is current.

6. Verify the PLGR has a valid Cryptographic fill.
7. Remain in the CONT mode until FOM of ONE is obtained.
8. Change the setup mode to AVG.
9. Allow the PLGR to record, per unit SOP, ensuring the FOM remains ONE for the entire operation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0802.14.07 (CORE) SUPERVISE THE ENTRY OF A USER DEFINED DATUM

CONDITION(S): Given a PLGR with a power supply, a 1:50,000 scale mapsheet referenced to a horizontal datum not programmed in the PLGR, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine the horizontal datum from the mapsheet.
2. Extract user defined data from the references.
3. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
4. Select the INIT option on the MENU screens.
5. Enter the user defined data on page four or five of the INIT displays.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0802.14.08 (CORE) SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS

CONDITION(S): Given a PLGR with a power supply and one stored waypoint, a 1:50,000 scale mapsheet referenced to a horizontal datum that is different than the datum of the stored waypoint but is a programmed datum in the PLGR, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
- 2. Select the edit menu of the WP menu.
- 3. Change the horizontal datum.
- 4. Store the change.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

TASK: 0802.14.09 (CORE) SUPERVISE THE PERFORMANCE OF PLGR TO PLGR OPERATIONS

CONDITION(S): Given one PLGR with a power supply, a one day almanac, several stored waypoints, user defined datum, a lock on at least one satellite, a second PLGR with a power supply, a PLGR to PLGR cable, and the reference.

STANDARD(S): Per the reference, ensuring the successful transfer of selected data from one PLGR to the other.

PERFORMANCE STEPS:

- 1. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
- 2. Ensure that both PLGRs have "STANDARD" selected for interface operations.
- 3. Select the "DATA-XFER" option of the menu.
- 4. Attach the PLGR to PLGR cable to the J-2 (RS-232) port on each PLGR.
- 5. Transfer all data from one PLGR to the other.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

TASK: 0802.14.10 (CORE) VERIFY THE LOADING OF CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT

CONDITION(S): Given one PLGR with a power supply, an AN/CYZ-10, survey and communications equipment, and the reference.

STANDARD(S): Per the reference, verifying the successful transfer of crypto variables and accurate time to selected survey and communications equipment.

PERFORMANCE STEPS:

- 1. Transfer crypto variables to applicable communications equipment.

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2. Transfer accurate time to applicable communications equipment.
3. Transfer crypto variables to applicable survey equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: 2ndLt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
 2. AN/PSN-11 PLGR Handbook
-

DUTY AREA 15 - TARGET AQUISITION/METEOROLOGICAL

TASK: 0802.15.01 (CORE) RECOMMEND PLANS, ORGANIZATION, AND EMPLOYMENT OF RADAR SET AN/TPQ-46

CONDITION(S): Given a tactical scenario, list of available radar assets, the commander's scheme of maneuver, and the reference.

STANDARD(S): Per the reference, ensuring the recommendation includes the capabilities and limitations of the AN/TPQ-46.

PERFORMANCE STEPS:

1. Develop a plan for tactical employment of all radar assets in offensive operations.
2. Develop a plan for tactical employment of all radar assets in defensive operations.
3. Advise the supported unit commander/staff on the capabilities and limitations of the AN/TPQ-46.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
-

TASK: 0802.15.02 (CORE PLUS) SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS

CONDITION(S): Given a target processing section, a radar platoon/detachment in support of battlefield operations, personnel, equipment, and the references.

STANDARD(S): Per the references, ensuring all targeting data is processed and routed to the appropriate personnel.

PERFORMANCE STEPS:

1. Ensure all radar acquired hostile weapon locations received in the TPC are properly recorded on a radar target card.
2. Ensure all radar acquired hostile weapon locations are verified on the target production map and routed through the following personnel:
 - a. Plotter.
 - b. Recorder.

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- c. S-2/Counterbattery Officer.
 - d. S-3.
- 3. Ensure all crater analysis and flash rays are properly processed.
 - a. Ensure all rays are properly recorded on the target production map.
 - b. Ensure all targets developed from rays are properly recorded on a crater analysis/flash ray target card.
 - c. Ensure all targets developed from rays are properly recorded in the artillery counterfire information journal.
- 4. Ensure all target indicators are evaluated using defined target selection standards.
- 5. Supervise the use and maintenance of the following forms, files, and journals:
 - a. Radar target card.
 - b. Radar target journal.
 - c. Artillery counterfire information journal.
 - d. Crater analysis/flash ray target card.
 - e. Target journal.
 - f. Radar fire mission data record.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
 - 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36
-

TASK: 0802.15.03 (CORE PLUS) SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS

CONDITION(S): Given a target processing section in support of battlefield operations, personnel and equipment, a scheme of maneuver, and the references.

STANDARD(S): Per the references, successfully establishing and maintaining command and control over radar assets.

PERFORMANCE STEPS:

- 1. Establish and execute a cuing schedule for supporting radars using the survivability matrix.
- 2. Establish control of radio nets assigned to the CBR platoon.
- 3. Assign and coordinate friendly fire missions, as required.
- 4. Direct and monitor voice/digital communications traffic to include the following:
 - a. Movement orders.
 - b. Operational reports.
 - c. Displacement reports.
 - d. New search data.
 - e. New zone data.

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- f. Cueing matrix.
- g. Jam strobe reports.
- h. Met messages.

5. Coordinate and/or provide logistical support for all personnel and equipment organic to the Target Processing Section.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
 - 2. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
-

TASK: 0802.15.04 (CORE PLUS) SUPERVISE ACQUIRING AND RECORDING GROUND MET DATA

CONDITION(S): Given a MET Section and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the determination and recording of the following:
 - a. Relative humidity.
 - b. Surface pressure.
 - c. Surface wind speed and direction.
- 2. Supervise the determination of surface temperature.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. RN AM**AD-A, Surface Equipment (Barometer, Psychrometer, and Anemometer)
- 3. TM 11-2421, Barometers ML-331/TM, ML-332/TM, ML-333/TM, and Mercurial Barometers ML-330/FM and ML-330A/FM
- 4. TM 11-427, Barometers ML-102-B, ML-102-D, ML-102-E, ML-102-F, ML-102-G, and ML-316/TM

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3-IF-104

MOS 0803, SURVEY, METEOROLOGICAL, AND RADAR OFFICER

DUTY AREA 01 - SURVEY OPERATIONS

TASK: 0803.01.01 (CORE) ADVISE THE COMMANDER ON CURRENT SURVEY CAPABILITIES AND LIMITATIONS

CONDITION(S): Given a tactical scenario involving employment of survey assets, a list of personnel and equipment of a survey section/team, and the reference.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Explain the mission of a survey section/team. (Survey operations necessary to place Field Artillery (FA) units on a common grid).
2. Explain the current capabilities of a survey section.
3. Explain the current limitations of a survey section.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

TASK: 0803.01.02 (CORE) SUPERVISE THE LOADING/MOVEMENT/EMPLACEMENT/DESTRUCTION OF SURVEY EQUIPMENT

CONDITION(S): Given the references, a complete survey section, adequate personnel, a map, grid coordinates and altitude to the next position, a coordinate scale, the requirement to move, MCWP 3-16.7 TTP's for Marine Artillery Survey, a simulated emergency wherein the new position is about to be over run, and the order to destroy section equipment.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Prepare a loading plan for a survey section.
2. Select a suitable site for emplacing the survey section.
3. Direct the movement, emplacement, and operation of a survey section.
4. Plan the destruction of the survey section's equipment and material to prevent enemy use.
5. Supervise the destruction of survey equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation
2. MCRP 3-16.1A, Marine Artillery Survey
3. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: The destruction of survey equipment may be simulated for training purposes.

TASK: 0803.01.03 (CORE) PLAN A SURVEY OPERATION

CONDITION(S): Given an operations order, available survey control, a briefing on the overall operation, mapsheets of the area of operations, coordinate scale, protractor (mils), compass, binoculars, the reference, and a vehicle with a radio and driver.

STANDARD(S): Per the reference, providing common control at critical locations within the area of operations in support of the commander's intent.

PERFORMANCE STEPS:

1. Gather pertinent information based on mission, enemy, terrain, weather, troops, and time (METT-TS-L).
2. Select a method of survey.
3. Select appropriate survey equipment.
4. Conduct a ground reconnaissance, as time permits.
5. Complete the plan.
6. Issue a survey order.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

TASK: 0803.01.04 (CORE) SUPERVISE SURVEY OPERATIONS

CONDITION(S): Given a tactical scenario, a survey section and equipment in support of combat operations, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Supervise a conventional survey operation.
 - a. Verify the field recorder's notebook.
 - b. Verify conventional survey computations.
 - c. Supervise the location of traverse errors.
 - d. Supervise the conversion of common control.
 - e. Supervise astronomic observations.
2. Supervise a GPS-S MSGR survey operation.
 - a. Supervise RTK (OTF).
 - b. Supervise fast static survey.
 - c. Supervise post processing.
 - d. Supervise the establishment of an absolute point.
 - e. Supervise a static survey.
 - f. Supervise a kinematic survey.

3. Supervise a Position and Azimuth Determining System survey.
 - a. Verify data provided from a PADS survey.
 - b. Verify the field recorder's notebook.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0332, Reconnaissance Marine
3. 0414, Ground Maintenance Management Procedures for Supervisors
4. 0813, Field Artillery Survey
5. 3530, Incidental Motor Vehicle Operator
6. 3532, Incidental Motor Vehicle Operator (CD)
7. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance
8. 7400, Warfighting Skills Distance Education Program

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods
-

TASK: 0803.01.06 (CORE) VERIFY PREVENTIVE MAINTENANCE, CHECKS, AND SERVICES ON ALL SURVEY EQUIPMENT AND ASSIGNED VEHICLES

CONDITION(S): Given the section's survey equipment, assigned vehicles, copies of all preventive maintenance records and inventories, and the references.

STANDARD(S): Per the references, ensuring compliance with mandated maintenance schedules.

PERFORMANCE STEPS:

1. Inspect (PMCS) on the section's T-2E theodolites and associated equipment.
2. Inspect (PMCS) on the section's DI-3000 Distomats and associated equipment.
3. Inspect (PMCS) on the section's M2A2 Aiming Circles and associated equipment.
4. Inspect (PMCS) on the section's PADS and associated equipment.
5. Inspect (PMCS) on the section's MSGR equipment to include communications equipment.
6. Inspect (PMCS) on the section's vehicle.
7. Inspect (PMCS) on the section's communications equipment.
8. Inspect maintenance logs, inventory sheets, and ERO/EROSLs for accuracy.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCO P4790.2, MIMMS Field Procedures
2. MCWP 3-16.1A, Field Artillery Survey

- 3. MSGR GPS-S MAINTENANCE MANUAL, MSGR GPS-S Maintenance Manual
- 4. TM 11-5820-890-10-1, SINCGARS Operator’s Manual
- 5. TM 11-5820-890-10-6, SINCGARS ICOM Ground Radios Pocket Guide
- 6. TM 2320-10/6A, Truck Utility 1-1/4 Ton 4X4
- 7. TM 4700-15/1, Equipment Record Procedures
- 8. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70
- 9. TM 9-1290-262-10, Operator’s Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System
- 4. 0813, Field Artillery Survey
- 5. 1320, Fundamentals of Diesel Engines (Web)
- 6. 1334, Diesel Engine Maintenance
- 7. 1335, Fundamentals of Diesel Engines
- 8. 3530, Incidental Motor Vehicle Operator
- 9. 3532, Incidental Motor Vehicle Operator (CD)
- 10. 3580, Automotive Engine Maintenance and Repair

TASK: 0803.01.07 (CORE) SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION

CONDITION(S): Given a map, an Observed Fire (OF) fan, compass, binoculars, coordinate scale, a target, communications with an Fire Direction Center (FDC), pencil, paper, forward observer, and the references.

STANDARD(S): Per the references, ensuring the fire mission includes the engagement of a target in both the adjust fire and fire for effect stages.

PERFORMANCE STEPS:

- 1. Supervise and verify the location of the target.
- 2. Supervise all radio transmissions.
- 3. Ensure Fire For Effect (FFE) stage is entered when impact is within 50 meters of the target.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: W01

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

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ADMINISTRATIVE INSTRUCTIONS: If probable error in range is greater than 38 meters, the observer may enter the FFE stage when a 200 meter bracket is spilt.

TASK: 0803.01.08 (CORE) SUPERVISE THE CONDUCT OF A CRATER ANALYSIS

CONDITION(S): Given the position, azimuth, weapon type, and weapon caliber as determined from a crater analysis, shell fragment, usable crater, templates, and the references.

STANDARD(S): Per the references, ensuring the tagged fragments and crater analysis report are sent to the S-2.

PERFORMANCE STEPS:

1. Ensure the most accurate method of crater analysis is used.
2. Verify the grid location of the crater.
3. Verify the azimuth to the suspected weapons location.
4. Supervise the tagging of shell fragments.
5. Ensure the crater analysis report and tagged fragments are sent to the S-2 via proper channels.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: W01

REFERENCE(S):

1. Defense Intelligence Agency (DIA) Projectile Fragmentation Identification Guide
2. MCRP 3-16.25, Field Artillery Target Acquisition
3. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
-

DUTY AREA 02 - MET OPERATIONS

TASK: 0803.02.01 (CORE) ADVISE THE COMMANDER ON CURRENT METEOROLOGICAL CAPABILITIES AND LIMITATIONS

CONDITION(S): Given a tactical scenario, an operations order, map, meteorological section, meteorological equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Explain the mission of the meteorological section.
2. Explain the current capabilities of the meteorological section.
3. Explain the current limitations of the meteorological sections.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
-

TASK: 0803.02.02 (CORE) VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON ALL METEOROLOGICAL EQUIPMENT AND VEHICLES

CONDITION(S): Given all of the section’s MET equipment, assigned vehicles, copies of all preventive maintenance records and inventories, and the references.

STANDARD(S): Per the references, ensuring all preventive maintenance records and inventories are reviewed.

PERFORMANCE STEPS:

1. Inspect PMCS on MET theodolites.
2. Inspect PMCS on the MMS.
3. Inspect the performance of operators troubleshooting procedures on the MMS for detected faults.
4. Inspect PMCS on the section’s vehicles.
5. Inspect PMCS on the section’s generators.
6. Inspect maintenance logs, inventory sheets, and Equipment Repair Order (ERO)/Equipment Repair Order Shopping Lists (EROSLs) for accuracy.
7. Supervise and coordinate calibration and publication program.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCO P4790.2, MIMMS Field Procedures
2. MCWP 3-16.5, Field Artillery Meteorology
3. TI-4733-15/21A, Survey Instrument Calibration Program
4. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
5. TM 4700-15/1, Equipment Record Procedures

TASK: 0803.02.03 (CORE) EVALUATE SIGNIFICANT WEATHER CHANGES

CONDITION(S): Given a change of weather during the sounding schedule, a stopwatch, an inflated balloon, meteorological equipment, adequate personnel, and the reference.

STANDARD(S): Per the reference, correctly identifying significant weather changes.

PERFORMANCE STEPS:

1. Identify the passage of warm and cold fronts.
2. Identify cloud types and verify their height.
3. Identify significant weather changes.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology

TASK: 0803.02.04 (CORE) SUPERVISE THE LOADING/MOVEMENT/EMPLACEMENT/DESTRUCTION OF METEOROLOGICAL EQUIPMENT

CONDITION(S): Given a complete Met section, adequate personnel, a map, grid coordinates and altitude to the next position, a coordinate scale, the requirement to move, a simulated/actual emergency wherein the new position is about to be over run, the order to destroy section equipment, and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Prepare a loading plan for a MET section.
2. Select primary and alternate sites for the MET section.
3. Direct the movement, emplacement, and operation of a MET section.
4. Plan the destruction of the MET section's equipment and material to prevent enemy use.
5. Supervise the destruction of MET equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation
2. MCWP 3-16.5, Field Artillery Meteorology
3. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
4. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

ADMINISTRATIVE INSTRUCTIONS:

1. Include a tactical emplacement which ensures the best possible coverage for supported units.
 2. Include site selection which affords the best use of meteorological equipment.
-

TASK: 0803.02.05 (CORE) PLAN A MET SECTION'S FLIGHT SCHEDULE

CONDITION(S): Given specific mission requirements and the references.

STANDARD(S): Per the references, ensuring timely and accurate MET data to the supported units.

PERFORMANCE STEPS:

1. Determine night/transition/afternoon hours.
2. Plan the section's flight schedule per the references and mission requirements.
3. Plan for additions to the flight schedule due to significant weather changes or operational requirements.
4. Select operating mode (LORAN, GPS, RDF).
5. Implement the section's flight schedule.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
-

TASK: 0803.02.06 (CORE) MANAGE THE MET SECTION'S EXPENDABLE INVENTORY

CONDITION(S): Given a MET section, an SL-3, inventory control sheets, references, and annual training plan.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Manage the inventory of a MET section’s expendable SL-3 components.
2. Determine the required amount of expendables for a 30 day operation.
3. Manage the expendables by supervising the reorder/resupply process.
4. Ensure the proper storage and rotation of all dated expendables.
5. Supervise the proper storage and handling of helium cylinders.
6. Supervise the proper storage of calcium hydride charges.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCO P4790.2, MIMMS Field Procedures
2. MCWP 3-16.5, Field Artillery Meteorology
3. SL-3 10103A, SL-3 MMS Expendables

ADMINISTRATIVE INSTRUCTIONS: When storing Calcium Hydride Charges or Helium Canisters, ensure proper safety procedures are followed.

TASK: 0803.02.08 (CORE) PLAN A METEOROLOGICAL OPERATION

CONDITION(S): Given the references, an operations order, available meteorological sites, a briefing on the overall operation, locations of all the supported units, map sheets of the area of operations, a plotting scale, protractor, compass, binoculars, and vehicle with radio and driver.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Gather information which influences meteorological planning based on mission, enemy, terrain and weather, troops, and time (METT-TS-L) from the commander’s guidance.
2. Conduct a map reconnaissance.
3. Select usable meteorological sites.
4. Conduct a ground reconnaissance, as time permits.
5. Complete the plan.
6. Issue a MET order.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology

TASK: 0803.02.09 (CORE) SUPERVISE METEOROLOGICAL OPERATIONS

CONDITION(S): Given a tactical scenario, a meteorological section and equipment in support of combat operations, and the references.

STANDARD(S): Per the references, ensuring mission support.

PERFORMANCE STEPS:

1. Coordinate meteorological requirements with supported units .

2. Supervise the operations of the Meteorological Measuring Set.
3. Supervise visual MET operations.
4. Supervise the delivery of meteorological messages.
5. Validate MET messages.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
-

DUTY AREA 03 - RADAR OPERATIONS

TASK: 0803.03.01 (CORE) ADVISE THE COMMANDER ON CURRENT RADAR CAPABILITIES AND LIMITATIONS

CONDITION(S): Given a tactical scenario, an operations order, a map, a radar section, radar equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Explain the mission of the radar section.
2. Explain the current capabilities of the radar section.
3. Explain the current limitations of the radar section.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCRP 3-16.25, Field Artillery Target Acquisition
-

TASK: 0803.03.02 (CORE) SUPERVISE RADAR OPERATIONS

CONDITION(S): Given a tactical scenario, a radar set in support of combat operations, radar team personnel, and the references.

STANDARD(S): Per the references, ensuring radar operability.

PERFORMANCE STEPS:

1. Supervise the input/deletion of firefinder zones.
2. Ensure the proper use of the operational features.
3. Supervise operations in the hostile mode.
4. Supervise operations in the friendly fire mode.
5. Supervise loading of Digital Terrain Elevation Data (DTED).
6. Identify system faults.
7. Supervise transmission of targeting data to automated systems.
8. Operate in hostile EW environment.
9. Supervise initialization of the Modular, Azimuth, Positioning System (MAPS).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

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REFERENCE(S):

- 1. MCRP 3-16.25, Field Artillery Target Acquisition
- 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

TASK: 0803.03.03 (CORE) VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON ALL RADAR EQUIPMENT AND VEHICLES

CONDITION(S): Given all of the section’s radar equipment, assigned vehicles, copies of all preventive maintenance records and inventories, and the references.

STANDARD(S): Per the references, ensuring compliance with and accuracy of all mandated preventive maintenance procedures.

PERFORMANCE STEPS:

- 1. Supervise and inspect PMCS on the following:
 - a. Radar set.
 - b. Communications equipment.
 - c. Generator set.
 - d. All vehicle assets.
- 2. Supervise and inspect maintenance logs, inventory sheets, and Equipment Repair Order (ERO)/Equipment Repair Order Shopping Lists (EROSLs) for accuracy.
- 3. Manage calibration inventory control program.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

- 1. TM 11-5820-401-10-1, Radio Set, AN/VRC-12/43-49
- 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36
- 3. TM 2320-10/6A, Truck Utility 1-1/4 Ton 4X4
- 4. TM 5-6115-585-12, Operation and Organizational Maintenance for Generator Set, Diesel Engine Driven, Tactical

TASK: 0803.03.04 (CORE) SUPERVISE THE LOADING/MOVEMENT/EMPLACEMENT/DESTRUCTION OF RADAR EQUIPMENT

CONDITION(S): Given a complete radar section, a map, grid coordinates and altitude to the next position, the requirement to move, a simulated/actual emergency wherein the position is about to be over run and the order to destroy equipment has been given, adequate personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Prepare a loading plan for a radar section.
- 2. Select primary and alternate sites for emplacing the radar and choose a site for the Control Display Terminal (CDT) for remote operations.
- 3. Direct the shutdown, movement, emplacement, and operation of a radar section.
- 4. Plan the destruction of the radar section’s equipment and material to prevent enemy use.
- 5. Supervise the destruction of radar equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation
2. MCRP 3-16.25, Field Artillery Target Acquisition
3. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

ADMINISTRATIVE INSTRUCTIONS: Include tactical emplacement that allows best possible coverage for supported units, and best site selection for use of radar equipment.

TASK: 0803.03.06 (CORE) PLAN A RADAR OPERATION

CONDITION(S): Given an operations order, available radar sites, a briefing on the overall operation, locations of all the supported units, location of enemy units, mapsheets of the area of operations, a plotting scale, a protractor, a compass, binoculars, FFPAS, a vehicle with a radio and driver, and the references.

STANDARD(S): Per the references, providing accurate counterfire and targeting information to the supported units within the area of operations in support of the commander's intent.

PERFORMANCE STEPS:

1. Gather information which influences radar planning based on mission, enemy, terrain and weather, troops, and time (METT-TS-L) from the commander's guidance.
2. Conduct a map reconnaissance.
3. Select usable radar sites.
4. Conduct a ground reconnaissance, as time permits.
5. Complete the plan.
6. Issue a radar order.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. MCRP 3-16.25, Field Artillery Target Acquisition
-

TASK: 0803.03.07 (CORE) SUPERVISE THE OPERATIONS OF THE TARGET PROCESSING CENTER (TPC)

CONDITION(S): Given the commander's guidance, a tactical scenario and operations order, a radar section, a Target Processing Center (TPC), maps and overlays, references, and assigned command and control automated systems.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise the data base construction of automated command and control systems.
2. Recommend the counterfire plan in accordance with the commander's guidance, Scheme of Maneuver, Scheme of Fires, and Field Artillery Plan.
3. Conduct target processing operations.
4. Supervise the emplacement, displacement, and movement of the Target Processing Center.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

- 1. FM 100-5, Operations
- 2. FM 34-130, Intelligence Preparation of the Battlefield
- 3. MCRP 3-16.25, Field Artillery Target Acquisition
- 4. MCWP 3-16A, Targeting Process

DUTY AREA 04 - TARGETING

TASK: 0803.04.01 (CORE) PERFORM INTELLIGENCE PREPARATION OF THE BATTLEFIELD

CONDITION(S): Given the commander’s guidance, a tactical scenario, organization for combat, an operations order, maps, references, doctrinal templates, and overlays.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Identify probable courses of enemy action based on the Modified Combined Obstacle overlay and Doctrinal Template.
- 2. Assist in the production of Situational and Event Templates.
- 3. Evaluate probable enemy courses of action.
- 4. Identify potential high pay-off targets.
- 5. Assess enemy Electronic Warfare capability.
- 6. Assess enemy engineer capability.
- 7. Assess enemy Chemical, Biological, and Radiological capability.
- 8. Coordinate the development of the intelligence collection plan and synchronize it with the fire support target acquisition plan.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

- 1. FM 6-20-10, The Targeting Process
- 2. MCWP 3-16A, Targeting Process

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
- 2. 8500, Amphibious Warfare Distance Education Program (Phase I)
- 3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0803.04.02 (CORE) SUPERVISE THE OPERATIONS OF THE TARGETING ELEMENT

CONDITION(S): Given a tactical situation, an operation order, maneuver and artillery organization for combat, available target acquisition and sensor assets, assigned Command and Control automated systems, approved maneuver and fires Courses of Action, commander’s guidance on automation of fire support decisions, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the development and wargaming of Fire Support Coordination Measures.
- 2. Supervise the development and wargaming of Target Selection Standards.

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ENCLOSURE (3)

3. Supervise the development and wargaming of the Attack Guidance Matrix.
4. Supervise the development and wargaming of the High Payoff Target List.
5. Recommend Target Location Errors for sensors and loiter times for High Payoff Targets.
6. Recommend automated decision processing in accordance with approved Fires Courses of Action, Scheme of Maneuver, and Scheme of Fires.
7. Supervise targeting operations during the execution of the plan.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. FM 100-5, Operations
 2. FM 34-130, Intelligence Preparation of the Battlefield
 3. MCRP 3-16.25, Field Artillery Target Acquisition
 4. MCWP 3-16A, Targeting Process
-

TASK: 0803.04.03 (CORE) RECOMMEND FIRE SUPPORT COORDINATION MEASURES AND COORDINATE FIRES

CONDITION(S): Given instructions on the Fire Support Element, the tactical situation, maps, overlays, automated Command and Control systems, formal and informal target lists, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Recommend fire support coordination measures that support the Scheme of Maneuver and Scheme of Fires.
2. Discuss the purpose and graphics in establishing authority for the following:
 - a. Boundaries, permissive and restrictive measures.
 - b. Cross-boundary clearance of fires.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

1. FM 100-5, Operations
 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
 4. MCWP 3-16A, Targeting Process
-

TASK: 0803.04.04 (CORE) RECOMMEND THE PLANNING AND CONTROL OF TARGET ACQUISITION ASSETS

CONDITION(S): Given the commander's guidance, a tactical scenario and operations order, organization for combat, maps, overlays, references, and assigned Command and Control automated systems.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Advise the commander of the capabilities and limitations of all target acquisition assets.

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ENCLOSURE (3)

- 2. Recommend positioning of target acquisition assets.
- 3. Recommend the area of coverage for target acquisition assets to support the Scheme of Maneuver and Scheme of Fires.
- 4. Recommend the use of zones for assigned target acquisition assets.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

- 1. FM 34-130, Intelligence Preparation of the Battlefield
 - 2. FM 6-20, Fire Support in Airland Battle
 - 3. FM 6-20-1 (HTF), Field Artillery Cannon Battalion
 - 4. FM 6-20-10, The Targeting Process
 - 5. FM 6-20-30, Fire Support For Corps and Division
 - 6. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 - 7. FM 6-20-5, Field Artillery Delivered Scatterable Mines
 - 8. FM 6-20-50, Fire Support For Brigade Operations (Light)
 - 9. MCRP 3-16.25, Field Artillery Target Acquisition
-

TASK: 0803.04.05 (CORE) RECOMMEND THE TARGETING ARCHITECTURE FOR ASSIGNED COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE AUTOMATED SYSTEMS

CONDITION(S): Given a tactical scenario, operations order with approved annexes, commander's guidance on automated targeting decision processes, maps and overlays, references, and assigned command, control, communications, and intelligence automated systems.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the database construction of assigned automated fire support system(s) and its dissemination to affected adjacent and subordinate elements.
- 2. Construct the targeting architecture that automates decisions on the development, processing, and engagement of suitable fires targets based on the commanders guidance, Target Selection Standards, Attack Guidance Matrix, High Payoff Target List, and Target Location Error and loiter limitations.
- 3. Direct and assign automated sensor to shooter links.
- 4. Establish intelligence information input matrix that assigns priorities to intelligence data received from all sensors.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: W01

REFERENCE(S):

- 1. CEOI, Communications-Electronic Operating Instructions
- 2. FM 34-130, Intelligence Preparation of the Battlefield
- 3. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 4. FM 6-20-10, The Targeting Process
- 5. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)

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ENCLOSURE (3)

6. MCWP 3-16A, Targeting Process

TASK: 0803.04.06 (CORE) CONDUCT TACTICAL AND OPERATIONAL TARGETING OPERATIONS IN MARINE EXPEDITIONARY BRIGADE (MEB), MARINE EXPEDITIONARY FORCE (MEF), AND JOINT TASK FORCE (JTF) LEVEL

CONDITION(S): Given a tactical and operational scenario, an operation order and operation plan, force organization table of organization, force artillery commander's concept of operations, available force target acquisition assets, doctrinal templates, maps and overlays, a targeting element, references, and available Command, Control, Communication, references, and Intelligence automated systems.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Conduct mission analysis and Intelligence Preparation of the Battlefield at operational and tactical level.
2. Supervise the operations of a targeting element
3. Recommend fire support measures and coordinate fires.
4. Recommend the planning and control of available force target acquisition assets.
5. Recommend the targeting architecture for Command, Control, Communications, and Intelligence automated systems.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: CW03

REFERENCE(S):

1. FM 100-5, Operations
2. FM 34-130, Intelligence Preparation of the Battlefield
3. FM 6-20-10, The Targeting Process
4. FM 6-20-30, Fire Support For Corps and Division
5. FM 6-20-50, Fire Support For Brigade Operations (Light)
6. MCWP 3-16, Fire Support Coordination
7. MCWP 3-16.2, MCFSS Techniques and Procedures
8. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
9. MCWP 3-16A, Targeting Process

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3-IIF-16

MOS 0811, FIELD ARTILLERY CANNONEER

DUTY AREA 01 - CANNONEER

TASK: 0811.01.01 (CORE PLUS) MOUNT/DISMOUNT A MACHINEGUN ON A 5-TON TRUCK

CONDITION(S): Given an "M" series truck with a ring mount, a Mark 64 (universal) mount with appropriate adapters, the references, and a machinegun (M240G, M2, or MK19).

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Connect the Mark 64 mount to ring mount.
2. Select and emplace the appropriate adapter (if required).
3. Mount machinegun on Mark 64 mount.
4. Dismount the machinegun.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
2. TM 08686A-13 & P/1, Operator and Organizational/Intermediate Maintenance With Repair Parts List and Component Inventory List for the Mount Machinegun MK 64, Mod 5

DISTANCE LEARNING PRODUCT(S):

1. 0368, The Heavy Machinegun Crewman
-

TASK: 0811.01.02 (CORE PLUS) NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED

CONDITION(S): Given a vehicle with cross-country capability and a driver, standard map of the area, a coordinate scale, a protractor, a compass, and the references.

STANDARD(S): Per the references, successfully directing the driver from a known point to a distant point using terrain association and dead reckoning.

PERFORMANCE STEPS:

1. Determine effects of terrain on vehicle movement.
2. Determine effects of weather on vehicle movement.
3. Navigate by terrain association.
4. Navigate by dead reckoning.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation
2. FM 90-3 (HTF), Desert Operations (How To Fight)

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
2. 0385, Land Navigation (Web)

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

TASK: 0811.01.03 (CORE) PREPARE A POSITION TO RECEIVE OR TO EMPLACE A HOWITZER

CONDITION(S): Given two gun-guide stakes (aluminum or wood) with engineer tape approximately 20 feet long, one pantel marking stake, a lensatic compass or a declinated M2 compass, one wire stake, a complete DR-8 with H-200, TA-312/PT field telephone or AN/PRC-68, an azimuth of fire, a grease pencil, an M16A2 rifle, 2 meter bar (if required), an aiming circle operator, the references, and a howitzer position.

STANDARD(S): Per the references, emplacing gun-guide tape and stakes within +/- 20 mils of the azimuth of fire and correctly recording initial lay data.

PERFORMANCE STEPS:

- 1. Record the azimuth of fire and emplace gun-guide tape and stakes within +/- 20 mils, using a lensatic compass.
- 2. Establish communication hook up to DR-8 and TA-312/PT field telephone or H200 headset.
- 3. Check communications.

Note: If communications is established, state, "Number (SO-AND-SO), READY TO RECORD."

- 4. Emplace pantel marking stake and record deflection.
- 5. Using M16A2 rifle or 2 meter bar, assist in measuring distance (subtense) from howitzer to aiming circle (deflection and vertical angle).
- 6. Perform reconnaissance and select route of track plan, according to Standing Operating Procedure (SOP).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: Performance steps may vary according to unit SOP.

TASK: 0811.01.04 (CORE) EMPLACE AND RECOVER THE COLLIMATOR

CONDITION(S): Given a howitzer (emplaced and laid for direction), the references, a collimator, and a gunner on the howitzer pantel.

STANDARD(S): Per the references, emplacing within 1 minute and recovering within 1 minute.

PERFORMANCE STEPS:

- 1. Emplace the collimator.
 - a. Set the collimator up, pointing one leg towards pantel, 4 to 15 meters from the pantel.
 - b. Adjust legs, if required.
 - c. Place cover under tripod with closed end pointed at muzzle of howitzer.

- d. Push feet of legs into ground to stabilize the collimator.
 - e. Center azimuth adjustment screw.
 - f. Properly line up front and rear sights with lens of pantel.
 - g. Ensure cross level/bubble is between two outer red lines in vial and does not touch two outer red lines. Finger tighten cross level clamping knob to immobilize the optical assembly.
 - h. Rotate azimuth adjustment screw left and right, as directed by the gunner.
2. Recover collimator.
 - a. Secure optical assembly in down position.
 - b. Secure cover by fastening three cover latches.
 - c. Retract extended legs, and finger tighten locking knobs.
 - d. Secure three legs to cover with strap.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0820, The M198 155mm Towed Howitzer
-

TASK: 0811.01.05 (CORE) EMPLACE AND RECOVER THE AIMING POSTS

CONDITION(S): Given a howitzer (emplaced and laid for direction), a set of aiming posts, section equipment, references, and a gunner on the pantel.

STANDARD(S): Per the references, emplacing the aiming posts within 2 minutes and recovering the aiming posts within 1 minute.

PERFORMANCE STEPS:

1. Emplace the aiming posts.
 - a. Assemble the aiming posts (night lighting devices attached to near and far posts, per unit SOP, if needed).
 - b. Position far aiming post 100 meters and near aiming post 50 meters from the howitzer, as directed from the gunner's hand and arm signals.

Note: If far aiming post cannot be placed 100 meters from the howitzer, place it as far away as possible; then place near post one half the distance.
2. Recover the aiming posts within 1 minute.
 - a. Disassemble the aiming posts and lights, if needed.
 - b. Store the equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
2. MCWP 3-16.3, Field Artillery Cannon Battery

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ENCLOSURE (3)

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

TASK: 0811.01.06 (CORE) EMPLOY PROPER AMMUNITION STORAGE PROCEDURES ON VEHICLES AND IN THE HOWITZER POSITION

CONDITION(S): Given an ammunition vehicle, required ammunition, a loading plan, adequate materials for dunnage, tarpaulin(s), section equipment, Loose Projectile Restraint System (LPRS), references, and an assistant.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Store ammunition in the vehicle, either palletized or with the Loose Projectile Restraint System (LPRS).
 - a. Separate ammunition by type, per local Standing Operating Procedures (SOP).
 - b. Protect ammunition from the weather and careless smokers.
 - c. Place ammunition at least 2 inches off the bed of the vehicle.
 - d. Secure ammunition to prevent movement in any direction.
- 2. Store ammunition in the field.
 - a. Separate ammunition by type, lot, and weight zone.
 - b. Ensure there are at least 6 inches of dunnage underneath ammunition.
 - c. Protect ammunition from direct sunlight and weather conditions with tarpaulins.
 - d. Inspect ammunition for serviceability.
 - e. Report propellant temperature to Fire Direction Center (FDC), as directed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

ADMINISTRATIVE INSTRUCTIONS: This task does not apply to combat loading of ammunition.

TASK: 0811.01.07 (CORE) PREPARE SEPARATE-LOADING PROJECTILE FOR FIRING

CONDITION(S): Given separate-loading ammunition, appropriate fuze wrenches and fuze setters, section equipment, an assistant, a fire command, and the references.

STANDARD(S): Per the fire command.

PERFORMANCE STEPS:

- 1. On the command, "SHELL _____", select the announced projectile and remove the eyebolt.
- 2. On the command, "FUZE _____", select the announced fuze and assemble it to the projectile using the proper fuze wrench.
- 3. On the command, "TIME _____", set the announced time using appropriate fuze setter, if applicable.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2 No Per Iteration requirement.	1.000 EA	0.000 EA	0.000 EA
D506	155MM M116 SMK, HC No per iteration requirement.	1.000 EA	0.000 EA	0.000 EA
D528	PROJ 155MM, SMOKE, WP, M825 No Per Iteration requirement.	1.000 EA	0.000 EA	0.000 EA
D544	PROJ 155MM, HE, M107 No Per Iteration requirement.	1.000 EA	0.000 EA	0.000 EA
D550	PROJ 155MM, SMOKE, WP, M110A1 No Per Iteration requirement.	1.000 EA	0.000 EA	0.000 EA
D579	PROJ 155MM, HE RA, M549A1 No requirement for initial proficiency.	1.000 EA	0.000 EA	0.000 EA
N289	FUZE, ELECTRONIC TIME No per iteration requirement. May use N248, M565 MT or N285, M577 MTSQ	1.000 EA	0.000 EA	0.000 EA
N290	FUZE, ELECTRONIC TIME No per iteration requirement. May use N278, M564 MTSQ or N286, M582 MTSQ	1.000 EA	0.000 EA	0.000 EA
N291	FUZE, PROXIMITY (VT) No per iteration requirement. May use N463, M728 VT or N464, M732 VT	1.000 EA	0.000 EA	0.000 EA
N340	FUZE, PD, M739 No Per Iteration requirement. May use N335, M557 PD SQ/D	1.000 EA	0.000 EA	0.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: DODICs in quantities listed in ammunition table reflect amount and type necessary to train the task as a stand-alone task. During collective training, this task is performed and evaluated during live-fire training. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

TASK: 0811.01.08 (CORE) PREPARE SEPARATE-LOADING PROPELLANT FOR FIRING

CONDITION(S): Given separate-loading ammunition propellant, section equipment, an assistant, fire commands, and the references.

STANDARD(S): Per the fire commands.

PERFORMANCE STEPS:

- 1. On the command, "CHARGE _____", select the announced propellant.

Note: Use only nonmetallic hammers or tools to open powder charges.
- 2. Inspect the propellant.
- 3. Cut the charge to the announced charge.
- 4. Carry the cut charge to the No. 1 cannoneer.
- 5. Inspect charge before loading.
- 6. Carry excess charge bags, if any, to the "mission pit."

- 7. Move powder bags from "mission pit" to "End Of Mission (EOM) pit" upon receipt of EOM.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D532	CHG PROP 155MM, RED BAG, M203 155mm M203, red bag, with zone 8 super, used only in the M198 towed howitzer at this time.	1.000 EA	0.000 EA	0.000 EA
D533	CHG PROP 155MM, RED BAG, M119 155mm M119/M119A1, white bag, with zone 8 only.	1.000 EA	0.000 EA	0.000 EA
D534	155MM M119/119A1, WB, W/ZONE 8	1.000 EA	0.000 EA	0.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	1.000 EA	0.000 EA	0.000 EA
D541	CHG PROP 155MM, WHITE BAG, M4	1.000 EA	0.000 EA	0.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: DODICs in quantities listed in ammunition table reflect amount and type necessary to train the task as a stand-alone task. During collective training, this task is performed and evaluated during live-fire training. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

TASK: 0811.01.09 (CORE) RESPOND TO FIRE COMMANDS

CONDITION(S): Given all the fire command elements.

STANDARD(S): Per the reference, correctly responding to all fire command elements.

PERFORMANCE STEPS:

- 1. Execute the following commands:
 - a. WARNING ORDER
 - b. PIECES TO FOLLOW, PIECE(S) TO FIRE, METHOD OF FIRE
 - c. SPECIAL INSTRUCTIONS
 - d. PROJECTILE
 - e. AMMUNITION LOT
 - f. CHARGE
 - g. FUZE
 - h. FUZE SETTING
 - i. DEFLECTION
 - j. QUADRANT
 - k. METHOD OF FIRE FOR EFFECT
 - l. SPECIAL METHODS OF FIRE
 - m. CHECK FIRING/CEASE FIRING/CEASE LOADING
 - n. END OF MISSION

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

TASK: 0811.01.10 (CORE) UNPACK THE M712/M823 PROJECTILE

CONDITION(S): Given an M712/M823 projectile in its container, a tarpaulin or a clean dry surface, an assistant, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Check humidity indicator, ensuring the reading is below 40 percent.
- 2. Break metallic seal wire (if still present) located on center latch assembly.
- 3. Release pressure in canister.
- 4. Depress manual relief valve.
- 5. Release all 10 latches.
 - a. Start at one end, and open corresponding left-side and right-side latches.
 - b. Pull latch all the way to release t-bolts.
 - c. Push latch with t-bolts all the way down.
- 6. Separate cover from container body and place on the ground upside down alongside the body.
- 7. Release tension mechanism.
- 8. Partially pull the torquing rod from rear end of torsion mechanism.
- 9. Remove fin and wing preload bands and place them in container cover.
- 10. Remove projectile from the container by lifting it up using the lifting straps provided.
- 11. Place the projectile on a surface free of dirt or water.
- 12. Remove lifting straps and place them in the container.
- 13. Keep the container and all packing materials for reuse, or return complete container to battalion ammunition section.

CAUTION: Inspect projectile for obvious damage or other conditions that would prevent use. If projectile appears unusable, repack, and return to battery ammunition section or evacuate to higher echelon. Keep hands off the clear nose cone.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D510	PROJ 155MM, COPPERHEAD, M712	1.000 EA	0.000 EA	0.000 EA
	D512, Projectile, 155mm,			
	Training, M823 may be used for			
	this task when not conducting a			
	live fire mission.			

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: DODICs in quantities listed in ammunition table reflect amount and type necessary to train the task as a stand-alone task. During collective training, this task is performed and evaluated during live-fire training. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

TASK: 0811.01.11 (CORE) PREPARE THE M712/M823 PROJECTILE FOR FIRING

CONDITION(S): Given an M712/M823 projectile, screwdriver or M18 fuze wrench, reference, and a fire command.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Unpack and inspect M712/M823 projectile.
- 2. Ensure the extractor is set up and ready for use.
- 3. Set the time and code switches.
- 4. (Assistant Gunner) Set elevation of the gun tube between 250 and 500 mils for loading.
- 5. (Section Chief) Recheck nose cone window and obturator for cleanliness.
- 6. (Section Chief) Recheck time and code switches.
- 7. Remove the steel fin and wing retainer clamps before removing the round.
- 8. (Cannoneers No. 3 and 4) Insert M712/M823 projectile into the powder chamber. Ramming and firing procedures are identical to all other projectiles.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D510 PROJ 155MM, COPPERHEAD, M712		1.000 EA	0.000 EA	0.000 EA
D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.				

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: DODICs in quantities listed in ammunition table reflect amount and type necessary to train the task as a stand-alone task. During collective training, this task is performed and evaluated during live-fire training. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

For training purposes, the M823 projectile is used. No live propelling charge is used with the M823 training round.

The M712 projectile is not adaptable for use with the current loading tray. Damage to projectile or injury to personnel could occur.

TASK: 0811.01.12 (CORE) UNLOAD THE M712/M823 PROJECTILE

Annex III to
Appendix F to
ENCLOSURE (3)

CONDITION(S): Given a 155mm howitzer with a rammed M712/M823 projectile, propellant, primer, an order to unload the projectile, an assembled extractor, an assistant, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Remove the primer and propellant charge.
2. Elevate or depress tube to approximately 300 mils.
3. Cock the extractor.
4. Attach the extractor to the base of the projectile.
5. Pull the extractor to ensure that it is secured on the base.
6. Turn the extractor drive nut counterclockwise by hand until the brace touches and centers across the face of the breech ring assembly.
7. Use ratchet to extract projectile from forcing cone.
8. Slide extractor and projectile out until base passes breech ring.
9. Remove extractor from projectile.
10. Remove projectile.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Pvt

REFERENCE(S):

1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D510	PROJ 155MM, COPPERHEAD, M712 D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.	1.000 EA	0.000 EA	0.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: DODICs in quantities listed in ammunition table reflect amount and type necessary to train the task as a stand-alone task. During collective training, this task is performed and evaluated during live-fire training. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

TASK: 0811.01.13 (CORE) REPACK THE M712/M823 PROJECTILE

CONDITION(S): Given an unpackaged M712/M823 projectile, an M712/M823 container, an assistant, cleaning materials, torquing rod, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Clean projectile.
2. Prepare container.
 - a. Switch the container halves, if required.
 - b. Open the container by removing lifting straps, and remove fin and wing preload bands.

3. Install fin and wing preload bands.
- a. Check the decals at the nose end of the container halves to ensure the cover body matches.

b. Push fin and wing preload bands into the projectile.

c. Lift projectile, and position it over the open container.

d. Lower the projectile, and carefully guide the nose cone into the retainer ring (located in the open container).

e. Turn the tension mechanism clockwise, using torquing rod, as far as possible to ensure the projectile is snug.

f. Position torquing rod in holes so the rod is horizontal.

g. Place the container cover on the lower container half.
- NOTE: The inside cradles should align and the relief valve and humidity indicator should be to the rear of the container.
- h. Start on the end opposite, and place the humidity indicator to the rear of the container.

i. Place t-bolts in the cover recesses, and close corresponding left-side and right-side latches at the same time, in pairs.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Pvt

REFERENCE(S):

1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D510 PROJ 155MM, COPPERHEAD, M712		1.000 EA	0.000 EA	0.000 EA
D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.				

DISTANCE LEARNING PRODUCT(S):

1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: DODICs in quantities listed in ammunition table reflect amount and type necessary to train the task as a stand-alone task. During collective training, this task is performed and evaluated during live-fire training. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

TASK: 0811.01.14 (CORE) COMMAND, "CHECK FIRING", WHEN AN UNSAFE CONDITION EXISTS

CONDITION(S): Given a howitzer in a firing position, a howitzer section, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Command, "CHECK FIRING", when observing an unsafe condition.
2. State the nature of the CHECK FIRING.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery

Annex III to
Appendix F to
ENCLOSURE (3)

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer
-

TASK: 0811.01.16 (CORE) EMPLOY SECTION EQUIPMENT

CONDITION(S): Given all SL-3 howitzer section equipment and the reference.

STANDARD(S): Accurately identifying and maintaining section equipment, per the reference.

PERFORMANCE STEPS:

- 1. Identify section equipment and its purpose.
- 2. Demonstrate proper use of the equipment.
- 3. Maintain the equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer
-

TASK: 0811.01.17 (CORE) GUIDE TRUCK/HOWITZER, USING HAND AND ARM SIGNALS

CONDITION(S): Given a howitzer with driver, a flashlight with filtered lens, a scenario involving confined and unconfined areas in daylight and darkness, and the reference.

STANDARD(S): Per the reference, observing all safety considerations and guiding truck/howitzer to within +/- 20 mils of initial deflection.

PERFORMANCE STEPS:

- 1. Position yourself so the driver can see you at all times.
- 2. Use proper hand and arm signals during daylight hours.
- 3. Use low visibility filter covered flashlights to signal during darkness or low visibility.
- 4. Guide the truck/howitzer into position.
- 5. Howitzer must be within +/- 20 mils of initial deflection.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 21-60, Visual Signals

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer
-

TASK: 0811.01.18 (CORE) RECORD AND MAINTAIN FIRE MISSION DATA ON RECORD OF MISSIONS FIRED (DA FORM 4513)

CONDITION(S): Given a blank Record of Missions Fired (DA Form 4513), standard data, voice firing commands or Gun Display Unit (GDU), a pencil, one assistant to announce firing data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Complete headings and record standard data.
2. Complete standard data.
3. Complete ammunition and fuzes on hand data.
4. Complete all fire commands and nonstandard data. Record fire command elements in this portion, unless already standardized.
5. Complete all expended ammunition data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
-

TASK: 0811.01.19 (CORE) SET UP AND MAINTAIN THE GUN DISPLAY UNIT (GDU)

CONDITION(S): Given a howitzer, Gun Display Unit (GDU) internal battery power (lithium), external wire W34 or W34A power cable, communications WD-1/TT wire, TL-13 wire cutters, SL-3 gear, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Set up the Gun Display Unit (GDU).

NOTE: All cables and wires must be connected to mount GDU.
2. Run self-test on Gun Display Unit (GDU). (See Chapter 3, Section III in TM 11-7440-283-12-2.)
3. Maintain the Gun Display Unit (GDU).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
 2. TM 11-7440-283-12-2, Computer Groups, Gun Direction
-

TASK: 0811.01.20 (CORE) MAINTAIN THE M94 MUZZLE VELOCITY SYSTEM (MVS)

CONDITION(S): Given an M94 Muzzle Velocity System (MVS), pencil or pen, clean rags, artist’s brush, and the reference.

STANDARD(S): Per the reference, performing all designated Preventive Maintenance Checks and Services (PMCS).

PERFORMANCE STEPS:

1. Check for obvious defects.
2. Perform System Self Test.
3. Perform System Test using the simulator.
4. Clean the M94 Muzzle Velocity System (MVS), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 09814A-14&P, M94 Muzzle Velocity System

TASK: 0811.01.21 (CORE) PREPARE THE M94 MUZZLE VELOCITY SYSTEM (MVS) FOR OPERATION

CONDITION(S): Given a howitzer with a mounted antenna installation bracket, an M94 Muzzle Velocity System (MVS), an assistant, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Set up the M94.
 - a. Mount the transceiver to transceiver mounting bracket.
 - b. Place control processor and display unit in desired location.
 - c. Connect 30-meter interconnection cable J-3 to transceiver.
 - d. Connect the other end of the 30-meter cable (J-3) to the control processor.
 - e. Turn the power ON/OFF switch to the OFF position.
- f. Connect the 2-meter or 50-meter power cable (J-1) to the control processor.
 - g. Connect the other end of the 50-meter power cable (J-1) to the power source.
2. Perform the System Self-tests.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 09814A-14&P, M94 Muzzle Velocity System
-

TASK: 0811.01.22 (CORE) DISASSEMBLE AND ASSEMBLE THE FIRING MECHANISM

CONDITION(S): Given an M198 howitzer, an M35 firing mechanism, SL-3 gear, an M18 fuze-setter wrench, and the reference.

STANDARD(S): Per the reference, reporting or correcting all discrepancies.

PERFORMANCE STEPS:

1. Remove the M35 firing mechanism.
2. Disassemble the M35 firing mechanism.
3. Assemble the M35 firing mechanism.
4. Install the M35 firing mechanism.
5. Correct or report discrepancies.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

1. 0820, The M198 155mm Towed Howitzer
-

TASK: 0811.01.23 (CORE) DISASSEMBLE AND ASSEMBLE THE BREECHBLOCK

CONDITION(S): Given an M198 howitzer, SL-3 gear, an assistant, and the reference.

STANDARD(S): Per the reference, reporting discrepancies and/or uncorrected deficiencies to organizational maintenance.

PERFORMANCE STEPS:

1. Remove the firing mechanism.
2. Remove the firing mechanism block assembly.
3. Remove the obturator spindle assembly.
4. Remove the breechblock assembly.
5. Disassemble obturator spindle assembly.
6. Install breechblock assembly.
7. Install the obturator spindle assembly.
8. Install the firing mechanism block assembly.
9. Install the firing mechanism.
10. Perform function check of breech mechanism.
11. Correct and/or report discrepancies.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

1. 0820, The M198 155mm Towed Howitzer

TASK: 0811.01.24 (CORE) LOAD AND FIRE A PREPARED ROUND

CONDITION(S): Given an M198 howitzer in a firing position, SL-3 gear, a prepared round, a primer, a fire command, three assistants, and the reference.

STANDARD(S): Per the reference, using the proper commands.

PERFORMANCE STEPS:

1. NOTE: All actions denote Number 1 man’s actions.

Inspect the bore.
2. Check the firing mechanism to ensure the primer expended in previous firing has been removed.
3. Load the fuzed projectile.
4. Load the propellant charge.
5. Close and lock the breechblock assembly.

WARNING: Never close the breechblock assembly unless you can see red ignitor pad on the base of the propellant charge.
6. Prime the howitzer.
7. Slide the firing mechanism block assembly fully to the right.

- 8. On the command, "HOOK UP", attach lanyard.
- 9. Fire on command.
- 10. Open the breech.
- 11. Swab the powder chamber and obturator.
- 12. Inspect the bore.

NOTE: If the tube is clear, announce, "BORE CLEAR."

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2	1.000 EA	0.000 EA	0.000 EA
D506	155MM M116 SMK, HC	1.000 EA	0.000 EA	0.000 EA
D528	PROJ 155MM, SMOKE, WP, M825	1.000 EA	0.000 EA	0.000 EA
D532	CHG PROP 155MM, RED BAG, M203	1.000 EA	0.000 EA	0.000 EA
D533	CHG PROP 155MM, RED BAG, M119	1.000 EA	0.000 EA	0.000 EA
D534	155MM M119/119A1, WB, W/ZONE 8	1.000 EA	0.000 EA	0.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	1.000 EA	0.000 EA	0.000 EA
D541	CHG PROP 155MM, WHITE BAG, M4	1.000 EA	0.000 EA	0.000 EA
D544	PROJ 155MM, HE, M107	1.000 EA	0.000 EA	0.000 EA
N289	FUZE, ELECTRONIC TIME May use N248, M565 MT or N285, M577 MTSQ.	1.000 EA	0.000 EA	0.000 EA
N290	FUZE, ELECTRONIC TIME May use N278, M564 MTSQ or N286, M582 MTSQ.	1.000 EA	0.000 EA	0.000 EA
N291	FUZE, PROXIMITY (VT) May use N463, M728 VT or N464, M732 VT.	1.000 EA	0.000 EA	0.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D.	1.000 EA	0.000 EA	0.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: D512, Projectile, 155mm, Training, M823 may be used for this task when not conducting a live fire mission.

TASK: 0811.01.25 (CORE) PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

CONDITION(S): Given an M198 howitzer requiring operational checks and services for all intervals of maintenance, SL-3 gear, clean rags, one assistant (if required), a pen, maintenance form, appropriate lubricants, and the references.

STANDARD(S): Per the references, following all safety precautions and warnings, and correcting or reporting all defects.

PERFORMANCE STEPS:

- 1. Perform equipment checks and services using Preventive Maintenance Checks and Services, section 2, chapter 2 of the TM.
- 2. Perform authorized maintenance inspections, per Maintenance Procedures in Section 3, Chapter 3 of the Technical Manual.
- 3. Report status of equipment and deficiencies.
- 4. Observe precautions and warnings.

Annex III to
Appendix F to
ENCLOSURE (3)

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: Inspections occur at regular intervals to avoid equipment damage and/or failure (before, during, and after firing operations; and on a weekly and monthly basis).

TASK: 0811.01.26 (CORE) TAKE IMMEDIATE ACTION FOR MISFIRE

CONDITION(S): Given an M198 howitzer; a misfire situation involving a cold tube, a warm tube, a warm tube in hot weather, and a hot tube; and the reference.

STANDARD(S): Per the reference, initiating corrective action within 5 minutes after chambering for a warm tube, and for a warm tube in hot weather, and observing all safety warnings and precautions.

PERFORMANCE STEPS:

- 1. Determine tube conditions.
- 2. Take appropriate action.
 - a. Perform immediate action procedures for a cold tube.
 - b. Perform immediate action procedures for a warm tube.
 - c. Perform immediate action procedures for a warm tube in hot weather.
 - d. Perform immediate action procedures for a hot tube.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

TASK: 0811.01.27 (CORE) PERFORM PREFIRE CHECKS

CONDITION(S): Given an M198 in a firing position and the reference.

STANDARD(S): Per the reference, reporting discrepancies and/or uncorrected deficiencies to the section chief.

PERFORMANCE STEPS:

- 1. Look through tube to ensure there are no obstructions.
- 2. Ensure the witness marks are aligned.
- 3. Determine whether oil reserve indicator shows between 2 and 10 reserves.
- 4. Ensure split rings are 3200 mils apart.
- 5. Perform any other before/during checks as stated in local Standing Operating Procedures (SOP).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0820, The M198 155mm Towed Howitzer

DUTY AREA 02 - GUNNER/ASSISTANT GUNNER

TASK: 0811.02.01 (CORE PLUS) DESTROY A HOWITZER

CONDITION(S): Given a howitzer with section equipment and personnel, demolition charges, combustible material, explosive ammunition, incendiary grenades, grenade launchers, rifles, machineguns, simulated/actual emergency wherein the position is about to be overrun, an order to perform emergency destruction on equipment, and the references.

STANDARD(S): Ensuring the destruction procedures (simulated in a training scenario) are followed in the proper sequence, per the references.

PERFORMANCE STEPS:

- 1. Perform destruction of the breech, breech mechanism, spares, and breech components.
- 2. Perform destruction of the recoil mechanism.
- 3. Perform destruction of the tube.
- 4. Perform destruction of sighting and fire control equipment.
- 5. Perform destruction of carriage and tires.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: Cpl

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.02 (CORE PLUS) TEST THE GUNNER’S QUADRANT

CONDITION(S): Given a howitzer, a gunner’s quadrant, the reference, and an assistant.

STANDARD(S): Per the reference, ensuring the micrometer test, end-for-end test, and vertical shoe test are correctly performed.

PERFORMANCE STEPS:

- 1. Perform the micrometer test.
- 2. Perform end for end test.
- 3. Perform the vertical shoe test.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.03 (CORE PLUS) LAY FOR QUADRANT, USING THE GUNNER’S QUADRANT

CONDITION(S): Given a howitzer, the references, a tested gunner’s quadrant, a fire command that includes use of the gunner’s quadrant, and an assistant.

STANDARD(S): Per the references, ensuring an accuracy of 0 mils within 30 seconds.

PERFORMANCE STEPS:

- 1. Set the announced quadrant on the gunner’s quadrant.
- 2. Place the gunner’s quadrant on the quadrant seats with the line of fire arrow toward the muzzle of the tube.
- 3. Direct the assistant to elevate or depress the tube until the bubble is level.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.04 (CORE PLUS) MEASURE THE QUADRANT, USING THE GUNNER’S QUADRANT

CONDITION(S): Given a howitzer with the tube elevated to an unknown quadrant, a tested gunner’s quadrant, and the references.

STANDARD(S): Per the references, ensuring measurement to the nearest whole mil within 30 seconds.

PERFORMANCE STEPS:

- 1. Place the gunner’s quadrant on the quadrant seats.
- 2. Center the bubble in the cross level vial.
- 3. Center the bubble on gunner’s quadrant.
- 4. Read the quadrant to the nearest whole mil from the gunner’s quadrant.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.05 (CORE PLUS) LAY A HOWITZER BY RECIPROCAL LAY, USING M100-SERIES SIGHT

CONDITION(S): Given two howitzers in firing positions, one laid on the azimuth of fire and the other positioned within 50 mils of the azimuth of fire, a command to lay the weapon, and the references.

STANDARD(S): Per the references, ensuring the howitzer is laid to an accuracy of 0 mils within 90 seconds, using the proper commands.

PERFORMANCE STEPS:

1. Sight in on the designated howitzer's pantel.
2. Take the reading on the azimuth scale.
3. Announce, "NUMBER (SO AND SO), ADJUST AIMING POINT THIS INSTRUMENT."

NOTE: Ensure the reading is converted using LARS (Left Add, Right Subtract). Add 3200 mils if the howitzer is to the left of the laying gunner. Subtract 3200 mils if the howitzer is to the right of the laying gunner.

4. Orient the weapon's pantel on the aiming point and announce, "NUMBER (SO AND SO), AIMING POINT IDENTIFIED." (The Gunner on the other howitzer)
5. Announce the converted reading, "NUMBER (SO AND SO), DEFLECTION (SO MUCH)."
6. Adjust the weapon's pantel on the aiming point and announce, "NUMBER (SO AND SO) DEFLECTION (SO MUCH) (SO MANY) MILS." (The Gunner on the other howitzer)
7. Set off announced deflection on the pantel and shift the howitzer until the vertical and horizontal reticle lines are centered on the laying howitzer's parallax shield. (The Gunner on the other howitzer)
8. Announce, "NUMBER (SO AND SO), READY FOR RECHECK." (The Gunner on the other howitzer)
9. Determine new reading, and announce, "NUMBER (SO AND SO) DEFLECTION (SO MUCH)."
10. Announce, "NUMBER (SO AND SO) DEFLECTION (SO MUCH) (SO MANY) MILS." (The Gunner on the other howitzer)
11. Announce, "READY FOR RECHECK." (The Gunner on the other howitzer)
12. Repeat Steps 7-9 until the difference is zero mils.

NOTE: Upon this announcement, Gunner on the other howitzer will give the hand and arm signal for 0 mils.

13. Announce, "NUMBER (SO AND SO) IS LAID."

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods
-

TASK: 0811.02.06 (CORE PLUS) PREPARE A GUNNER'S REFERENCE CARD

CONDITION(S): Given a howitzer that has been laid, aiming points emplaced, sector of fire, a grease pencil, a gunner's reference card, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record initial lay data.

- 2. Record standard data.
- 3. Record priority target data.
- 4. Record position corrections data.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.07 (CORE PLUS) PROCESS A FIRE MISSION WITH THE SECTION CHIEF’S ASSEMBLY (SCA) OF THE GUN DISPLAY UNIT (GDU)

CONDITION(S): Given a howitzer with a Gun Display Unit (GDU) installed, an operational SCA, a fire mission, two assistants, SL-3 gear, piece data and fire commands from the Battery Computer Unit (BCU) at the Fire Direction Center (FDC), and the references.

STANDARD(S): Per the references, ensuring safety precautions are employed.

PERFORMANCE STEPS:

- 1. Receive fire mission command for adjusting (base) piece. Record all missions on recorder sheet.
- 2. Receive command, "Fire-For-Effect" (FFE) (initial volley). Update fire and piece data, and place on weapon system.
- 3. Receive command, "Fire-For-Effect" (FFE) (subsequent volley). Update fire and piece data and place on weapon system.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. TM 11-7440-283-12-1-1, Operator’s Manual, Computer Group, Gun Direction

TASK: 0811.02.08 (CORE PLUS) PROCESS "CONTINUOUS FIRE", "FINAL PROTECTIVE FIRE", AND "SPECIAL INSTRUCTIONS" AND FIRE MISSION UPDATES WITH THE SECTION CHIEF’S ASSEMBLY (SCA) OF THE GUN DISPLAY UNIT (GDU)

CONDITION(S): Given a howitzer with a GDU installed, a fire mission ("FIRE WHEN READY" or "AT MY COMMAND"), two assistants, SL-3 gear, piece data, fire commands and/or special instructions from the Battery Computer Unit (BCU) at the Fire Direction Center (FDC), and the references.

STANDARD(S): Per the references, ensuring all safety precautions are employed.

PERFORMANCE STEPS:

- 1. Process continuous fire instructions. (Fire Direction Center (FDC) directs continuous fire on a target).
- 2. Process a Final Protective Fire (FPF) mission. (Fire Direction Center (FDC) directs Final Protective Fire (FPF)).
- 3. Process special instructions received during a fire mission. (Fire Direction Center (FDC) directs special missions.)
- 4. Process cease loading instructions. (Fire Direction Center (FDC) directs, "CEASE LOAD").

5. Process check fire instructions. (Fire Direction Center (FDC) directs checkfire).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
 2. TM 11-7440-283-12-1-1, Operator's Manual, Computer Group, Gun Direction
-

TASK: 0811.02.09 (CORE PLUS) TROUBLESHOOT THE GUN DISPLAY UNIT (GDU)

CONDITION(S): Given a howitzer equipped with a Gun Display Unit (GDU), two assistants, SL-3 gear, battery, W34/A power cable assembly, WD-1/TT communications wire, and the references.

STANDARD(S): Per the references, reporting all discrepancies to organizational maintenance.

PERFORMANCE STEPS:

1. Perform preliminary and key lighting test.
2. Perform the self-test (phase testing). (See CAUTION in Admin instructions.)
3. Perform troubleshooting.
4. Report communication failures and equipment malfunction to organizational maintenance.
5. After self-test, release SELF-TEST key, and return Gun Display Unit (GDU) to mission operation.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. TM 11-7440-283-12-2, Computer Groups, Gun Direction

ADMINISTRATIVE INSTRUCTIONS: NOTE: Use the self-test feature to check GDU operations. If any portion of the GDU fails to operate, refer to Chapter 3 (TM 11-7440-283-12-2) for troubleshooting techniques for possible problems. Report malfunctions or failures to supervisor, and/or send GDU to organizational maintenance for repair.

CAUTION: If processing a fire mission, do not perform the self-test. It is possible to lose fire mission information and piece data.

TASK: 0811.02.12 (CORE PLUS) OPERATE THE MUZZLE VELOCITY SYSTEM (MVS)

CONDITION(S): Given an M94 Muzzle Velocity System (MVS) which has been set up for the weapon, MCTM 09814A-14&P, accessories, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Turn on the M94 Muzzle Velocity System (MVS).
2. Enter and edit mission data.
3. Use proper shutdown and disassembly procedures.
4. Ensure results are submitted to the Fire Direction Center (FDC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

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REFERENCE(S):

- 1. MCTM 09814A-14&P, M94 Muzzle Velocity System

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.13 (CORE PLUS) LEAD A REACTION FORCE

CONDITION(S): Given a battery (-) of Marines with individual equipment, a report of an enemy force attacking, commander’s guidance to remain in position, and the reference.

STANDARD(S): Per the reference, successfully deploying to defend the battery position.

PERFORMANCE STEPS:

- 1. Signal the reaction force to muster at the rally point.
- 2. Deploy the reaction force.
- 3. Direct the movement and actions of the reaction force to defend the battery/platoon position.
- 4. Ensure proper personnel use and sight automatic weapons.
- 5. Call for supporting arms, if appropriate.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
G940	GRENADE, HAND, SMOKE, GREEN	2.000 EA	2.000 EA	12.000 EA
G945	GRENADE, HAND, SMOKE, YELLOW	2.000 EA	2.000 EA	12.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0321, The M240G Machinegunner
- 2. 0365, Anti-Armor Operations
- 3. 0368, The Heavy Machinegun Crewman
- 4. 0370, The Marine Rifleman: Combat Skills
- 5. 0372, The Marine Rifleman: Weapons
- 6. 0380, Infantry Squad Leader: Combat Leadership
- 7. 0382, Infantry Squad Leader: Weapons and Fire Support

TASK: 0811.02.14 (CORE PLUS) ALIGN AIMING POSTS, USING M100-SERIES SIGHT

CONDITION(S): Given a howitzer laid on the azimuth of fire, a complete set of aiming posts, an assistant, a grease pencil, the gunner’s reference card, and the reference.

STANDARD(S): Per the reference, ensuring no displacement in the reticle pattern.

PERFORMANCE STEPS:

- 1. Center cross level and elevation bubbles.
- 2. Rotate pantel in the azimuth deflection position direction to emplace aiming posts.

3. Align aiming posts by directing assistant with standard hand and arm signals.
4. Verify correct sight picture.
5. Record deflection from azimuth counter to aiming posts on gunner's reference card.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
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TASK: 0811.02.15 (CORE PLUS) ALIGN COLLIMATOR, USING M100-SERIES SIGHT

CONDITION(S): Given a howitzer laid on the azimuth of fire, a collimator, an assistant, a grease pencil, a gunner's reference card, and the reference.

STANDARD(S): Per the reference, ensuring the reticle pattern in the collimator is adjusted to the reticle pattern in the sight.

PERFORMANCE STEPS:

1. Place 3200 on deflection counter, and release the deflection clutch (M198 Only).
2. Sight through the eyepiece of the pantel and turn the azimuth knob until a suitable place to locate the collimator is sighted.
3. (Assistant) Emplace collimator (see Task 0811.01.04, Emplace and Recover the Collimator).
4. Align collimator with M100-series sight.
5. Announce, "SET."
6. Engage deflection clutch.
7. Verify sight picture.
8. Record deflection from the azimuth counter on gunner's reference card.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
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TASK: 0811.02.16 (CORE PLUS) LAY A HOWITZER FOR DEFLECTION, USING M100-SERIES SIGHT

CONDITION(S): Given an emplaced howitzer laid on the azimuth of fire, an aiming point (collimator, aiming posts, distant aiming point) emplaced, a fire command, and the reference.

STANDARD(S): Per the reference, using proper commands, and to an accuracy of 0 mils within 15 seconds.

PERFORMANCE STEPS:

1. Lay howitzer for deflection, using M1A1/M1A2 collimator as an aiming point.

- 2. Lay howitzer for deflection, using M1A2 aiming posts as the primary aiming posts.
- 3. Lay the howitzer for deflection using a distant aiming point (DAP) as the primary aiming point.
- 4. Lay howitzer for deflection, using M1A2 aiming posts as an alternate aiming point.
 - a. Open the protective door covering pantel azimuth counter.
 - b. Rotate azimuth knob until azimuth, on which aiming posts were originally emplaced, appear on azimuth counter.
 - c. Rotate azimuth knob until 3200 appears on deflection counter.
 - d. Close the door covering azimuth counter.
 - e. Follow either Step 2 or 3 above.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods
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TASK: 0811.02.17 (CORE PLUS) REFER THE PIECE

CONDITION(S): Given a howitzer in a firing position, a command to refer, an aiming point, an assistant, and the references.

STANDARD(S): Per the references, using proper commands, and ensuring the correct deflection to the aiming point is read to an accuracy of +/- 2 mils within 15 seconds.

PERFORMANCE STEPS:

- 1. Ensure the bubbles are centered.
- 2. Sight on the correct aiming point with the pantel.
- 3. Verify the sight picture.
- 4. Read the deflection from the azimuth counter.
- 5. Announce, "NUMBER (SO AND SO), AIMING POINT IDENTIFIED, DEFLECTION (SO MUCH)."

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods
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TASK: 0811.02.18 (CORE PLUS) REPORT THE CORRECT DEFLECTION

CONDITION(S): Given a howitzer laid on a known deflection, an aiming point, a command from the Fire Direction Center (FDC), and the references.

STANDARD(S): Per the references and to an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Go to the howitzer upon receiving the command from the Fire Direction Center (FDC), "REPORT THE CORRECT DEFLECTION."
2. Check the level of the bubble, cross-level, and elevation level vial.
3. Check for correct sight picture.
4. Read the deflection from the panoramic telescope (pantel).
5. Announce, "CORRECT DEFLECTION (SO MUCH)."

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods
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TASK: 0811.02.19 (CORE PLUS) LAY THE M198 HOWITZER FOR INITIAL DIRECTION OF FIRE

CONDITION(S): Given a howitzer in a firing position, an aiming circle, commands to lay the weapon, assistants, and the references.

STANDARD(S): Per the references and to an accuracy of 0 mils.

PERFORMANCE STEPS:

1. (Aiming Circle Operator) Announce, "NUMBER (SO AND SO) ADJUST, AIMING POINT THIS INSTRUMENT."
2. Place the initial deflection (from the gun guide) on the pantel, and sight in on aiming circle. Direct the shift of the howitzer until you are sighted in on the pantel.
3. Check to ensure:
 - a. Bubbles in pitch and cross level vial on M171 telescope and quadrant mount are centered.
 - b. Azimuth knob bar reads INDIRECT.
 - c. Correction counter is set at zero.
 - d. M17 elevation correction counter is set at zero.
 - e. M17 elevation counter is set at zero.
 - f. With deflection clutch engaged, set deflection counter at 3200, then disengage deflection clutch.

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4. Verify the assistant gunner checks M18 fire control quadrant to ensure cross level vial is centered, elevation correction counter is set at zero, and elevation is set as dictated by unit Standing Operating Procedures (SOP).
5. Verify the assistant gunner centers bubble in M18 elevation level vial by moving the tube with the handwheel.
6. Obtain initial deflection from aiming circle by announcing, "NUMBER (SO AND SO) AIMING POINT IDENTIFIED."
- NOTE: This announcement is made after pantel crosshairs are aligned on aiming circle and all bubbles are level. Subsequently, Aiming Circle Operator announces, "NUMBER (SO AND SO), DEFLECTION (SO MUCH)."
7. Repeat the deflection reading to the aiming circle operator by announcing, "NUMBER (SO AND SO), DEFLECTION (SO MUCH)."
- NOTE: If reading differs more than 10 mils, the Gunner directs the crew to shift trails until readings between pantel and aiming circle are less than 10 mils. If reading is less than 10 mils, Gunner will announce the number of mils and direct the baseplate to be dropped before continuing to the next STEP 8.
8. Place the deflection on the azimuth counter by turning azimuth knob until the deflection appears on azimuth counter.
9. Operate the traversing handwheel until the pantel crosshairs are centered on the aiming circle. Horizontal crosshair alignment is obtained by turning the elevation knob.
- NOTE: Ensure the bubbles are centered.
10. Announce, "NUMBER (SO AND SO) READY FOR RECHECK."
11. Repeat STEPS 9 through 11 until the difference between howitzer readings is 0 mils.
12. Announce, "NUMBER (SO AND SO) DEFLECTION (SO MUCH), 0 MILS", and give proper hand and arm signal for 0 mils.
13. (Aiming Circle Operator) Announce, "NUMBER (SO AND SO) IS LAID."
14. Record reading on azimuth counter and close door over azimuth counter.
15. Record deflection to aiming circle on gunner's reference card.
16. Lay the collimator.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods

TASK: 0811.02.20 (CORE PLUS) CONDUCT DIRECT FIRE WITH THE M100-SERIES PANORAMIC TELESCOPE (M137)

CONDITION(S): Given a howitzer in a firing position, a target, a fire command, in a daylight and darkness environment, and the references.

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STANDARD(S): Per the references, laying and firing on the target within 2 minutes (daylight) and 3 minutes (darkness) after the initial fire command.

PERFORMANCE STEPS:

1. Center the cross level bubble.
2. Set 3200 on the azimuth counter.
3. Turn azimuth knob bar to DIRECT fire position.
4. Use the reticle lay OR central lay method to set off the announced lead.
5. Announce, "FIRE", after the assistant gunner announces "SET" (Two Man, Two Sight Method) OR when ready (One Man, One Sight).
6. Continue to lay and fire on target until it is destroyed or until a subsequent fire command is issued.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
2. 0820, The M198 155mm Towed Howitzer

ADMINISTRATIVE INSTRUCTIONS: Proficiency must be demonstrated in both methods of direct fire: Two Man, Two Sight and One Man, One Sight.

TASK: 0811.02.21 (CORE PLUS) BORESIGHT WITH THE AIMING CIRCLE

CONDITION(S): Given a howitzer with section gear and personnel, an M2 aiming circle, a scenario wherein a distant aiming point or test target is not available, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. (Aiming Circle Operator) Set up M2 aiming circle between 30 and 50 meters in front of weapon.
2. Insert boresight disk and strings.
3. (Aiming Circle Operator) Set 3200 (M100-series sight) on aiming circle upper motion.
4. Align cannon bore on aiming circle.
5. Level the pitch-level vial cross-level bubbles of pantel.
6. (Aiming Circle Operator) Align vertical hairline of aiming circle on center of the cannon bore with the lower motion.
7. (Aiming Circle Operator) Align vertical hairline of the aiming circle to the pantel of the weapon using the upper motion.
8. (Aiming Circle Operator) Announce the instrument reading to the gunner.
9. Gunner sets the announced reading on the pantel.
10. Adjust the pantel, boresight adjustment shaft (M198), until the sight picture is centered on the lens of the aiming circle.

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INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

ADMINISTRATIVE INSTRUCTIONS: This is an emergency boresighting method.

TASK: 0811.02.22 (CORE PLUS) PREPARE A RANGE CARD FOR A HOWITZER

CONDITION(S): Given a howitzer that has been laid, aiming points emplaced, a sector of fire, appropriate firing tables, a grease pencil, a range card, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Prepare a sketch of sector of fire depicting targets.
 - a. Draw the symbols of the howitzer and the left and right limits of the sector of fire.
 - b. Sketch points on the range card that are likely targets, avenues of approach, or reference points.
 - c. Number identified points, from left to right.
- 2. Prepare the data portion of the range card.
 - a. Determine the type of shell.
 - b. Determine the charge and fuze setting from the firing tables for the charge selected.
 - c. Determine the deflection for each point.
 - d. Determine quadrant.
 - e. Determine range.
 - f. Complete the description and remark columns.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.23 (CORE PLUS) SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT

CONDITION(S): Given an ammunition vehicle, a loading plan including safety precautions, adequate materials for dunnage, howitzer ammunition, an RT 4000 Forklift, a tarpaulin, sand bags (if needed), a crew, and the reference.

STANDARD(S): Per the reference, observing all safety precautions.

PERFORMANCE STEPS:

1. Ensure ammunition is loaded securely and protected from damage and weather.
2. Ensure adherence to safety precautions.
3. Direct the crew to correct any errors observed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
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TASK: 0811.02.24 (CORE PLUS) MEASURE BORESIGHT ERROR

CONDITION(S): Given a howitzer with section gear, personnel, a scenario wherein firing began before boresighting could be accomplished, and the reference.

STANDARD(S): Per the reference, ensuring an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Install the alignment device.
2. Read the deflection from the azimuth counter to the alignment device.
3. Determine the error by finding the difference between the two readings.
4. Report the error, if applicable, and take appropriate action.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
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TASK: 0811.02.25 (CORE PLUS) BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)

CONDITION(S): Given an M198 howitzer in a firing position, a Distant Aiming Point (DAP) at least 1,500 meters away, SL-3 gear, sting (crosshairs), and the reference.

STANDARD(S): Per the reference, ensuring an accuracy of 0 mils within 3 minutes.

PERFORMANCE STEPS:

1. Attach crosshairs to scribe lines.
2. Sight in on Distant Aiming Point (DAP).
3. Align muzzle boresight on Distant Aiming Point (DAP).
4. Measure elevation to Distant Aiming Point (DAP), and elevate tube 2.3 mils.
5. Level bubbles.
6. Adjust 0 elevation line of the elbow telescope on Distant Aiming Point (DAP) using the boresight screw.

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- 7. Repeat STEPS 1-7 if elevation is misaligned by more than 0.5 mils.
- 8. Verify sight picture.
- 9. Remove crosshairs from muzzle.

NOTE: Remove breech boresight, if installed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.26 (CORE PLUS) LAY THE HOWITZER FOR QUADRANT, USING THE M18 OR M17 FIRE CONTROL QUADRANT

CONDITION(S): Given an M198 howitzer in a firing position, a fire command, a quadrant, and the reference.

STANDARD(S): Per the reference, using the proper commands and ensuring an accuracy of 0 mils within 30 seconds after the command is given (45 seconds for high angle mission).

PERFORMANCE STEPS:

- 1. Repeat the announced quadrant.
- 2. Set the quadrant.
- 3. Center the bubble in the elevation level vial by depressing or elevating the tube.
- 4. Center the bubble in the cross level vial.
- 5. Repeat STEPS 3 and 4 until both bubbles are centered.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.27 (CORE PLUS) MEASURE THE QUADRANT, USING THE M17 OR M18 FIRE CONTROL QUADRANT

CONDITION(S): Given an M198 howitzer elevated to an unknown quadrant and the references.

STANDARD(S): Per the references, announcing the quadrant within 15 seconds and ensuring an accuracy of 0 mils.

PERFORMANCE STEPS:

- 1. Center the bubble in the elevation vial without moving the tube.
- 2. Center the bubble in the cross level vial.
- 3. Announce the quadrant from the elevation counter.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

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ENCLOSURE (3)

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.02.28 (CORE PLUS) SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE

CONDITION(S): Given an M198 howitzer in a firing position, a fire command, a target for direct fire, and the reference.

STANDARD(S): Per the reference, within 60 seconds after the initial command is given and within 30 seconds after subsequent fire commands until the end of the mission, while using proper commands.

PERFORMANCE STEPS:

- 1. Repeat the announced range.
- 2. Determine the range, in mils, from direct fire range plate, if necessary.
- 3. Center the cross-level bubble.
- 4. Set the appropriate mil line on the center mass of the target by elevating or depressing the tube.
- 5. Check sight picture.
- 6. Repeatedly announce, "SET", until the weapon is fired.
- 7. If subsequent commands are received, repeat STEPS 2-5.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

ADMINISTRATIVE INSTRUCTIONS: NOTE: All steps listed denote the assistant gunner’s actions.

TASK: 0811.02.29 (CORE PLUS) LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP)

CONDITION(S): Given a prepared M198 howitzer in a firing position, a command to lay the weapon, a SAP, one assistant, a grease pencil, a gunner’s reference card, and the references.

STANDARD(S): Per the references, using proper commands, ensuring an accuracy of 0 mils within 50 seconds.

PERFORMANCE STEPS:

- 1. Set 3200 on deflection counter and release.
- 2. Place announced deflection on the azimuth counter.
- 3. Shift howitzer using trails or traverse the tube until Distant Aiming Point (DAP) is centered in reticle pattern (per Battery Standing Operating Procedures (SOP)).

- 4. Ensure bubbles are centered.
- 5. Announce, "NUMBER (SO-AND-SO), AIMING POINT IDENTIFIED, DEFLECTION (SO MUCH)."
- 6. Record lay deflection on gunner's reference card.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods
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TASK: 0811.02.30 (CORE PLUS) CHECK BORESIGHT OF THE PANORAMIC TELESCOPE, USING THE ALIGNMENT DEVICE

CONDITION(S): Given an M198 howitzer, an M139 alignment device, an assistant, and the reference.

STANDARD(S): Per the reference, ensuring the azimuth counter indicates 4800 +/- 0.5 mils, within 1 minute.

PERFORMANCE STEPS:

- 1. (Assistant Gunner) Set the M18 fire control quadrant elevation counter at 0000 and the elevation correction counter at 00.
- 2. (Assistant Gunner) Level the elevation bubble.
- 3. Level the M171 telescope and quadrant mount and close parallax shield.

NOTE: Ensure the bubble in pitch level vial remains centered until boresighting of pantel is complete.
- 4. Lift azimuth counter door, and turn azimuth knob until a 4800 mil reading is obtained on azimuth counter.
- 5. (Assistant Gunner) Install the alignment device.
- 6. Verify the sight picture.
- 7. Try two other M139 alignment devices from adjacent howitzers if azimuth counter does not indicate 4800 + or - 0.5 mils. (See Task 0811.09.12, PERFORM FIRE CONTROL ALIGNMENT TESTS.)
- 8. Remove M139 after verification is complete.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief
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TASK: 0811.02.31 (CORE PLUS) ADJUST THE EQUILIBRATORS

CONDITION(S): Given an M198 howitzer with the equilibrators out of adjustment, a 1/2" breaker bar, and the reference.

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STANDARD(S): Per the reference, ensuring equal effort is required to elevate or depress the cannon tube.

PERFORMANCE STEPS:

1. Determine whether equilibrators are in adjustment by elevating and depressing the tube.
2. Adjust, as required.
3. Repeat STEP 1 to ensure equal effort is required to elevate or depress the tube.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Cpl

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
 2. 0820, The M198 155mm Towed Howitzer
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TASK: 0811.02.32 (CORE PLUS) PERFORM FIRE CONTROL ALIGNMENT TESTS

CONDITION(S): Given an M198 howitzer, SL-3 gear, section crew, one 5-ton jack, a level surface, three M139 alignment devices, gunner's quadrant, and the reference.

STANDARD(S): Per the reference, ensuring the on-carriage fire control equipment and the gunner's quadrant are correctly adjusted and reported.

PERFORMANCE STEPS:

1. Test the gunner's quadrant. (See Task 0811.02.02, TEST THE GUNNER'S QUADRANT.)
2. Prepare the howitzer for fire control alignment.
3. Conduct the tests of the on-carriage fire control equipment.
4. Notify organizational maintenance if any alignment device exceeds the tolerance (+ or - 1 mil).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
2. 0820, The M198 155mm Towed Howitzer

TASK: 0811.02.33 (CORE PLUS) TROUBLESHOOT COMMON MALFUNCTIONS

CONDITION(S): Given an M198 howitzer with section equipment, personnel, a simulated/actual malfunction, and the reference.

STANDARD(S): Per the reference, correcting the malfunction.

PERFORMANCE STEPS:

1. Perform troubleshooting procedures on cannon.
2. Perform troubleshooting procedures on carriage.
3. Perform troubleshooting procedures on fire control equipment.

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ENCLOSURE (3)

- 4. Perform troubleshooting procedures on recoil mechanism.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Cpl

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
-

TASK: 0811.02.34 (CORE PLUS) BORE SIGHT THE M137 PANORAMIC TELESCOPE USING A DISTANT AIMING POINT (DAP)

CONDITION(S): Given an M198 howitzer in a firing position, SL-3 gear, bore sight disk, string (cross hairs), a Distant Aiming Point (DAP) at least 1500 meters away, and the reference.

STANDARD(S): Per the reference, and to an accuracy of 0 mils within 3 minutes.

PERFORMANCE STEPS:

- 1. Zero elevation correction counter and elevation counter.
- 2. Attach cross hairs to the muzzle over witness marks.
- 3. Insert bore sight disk.
- 4. Level trunnions within 90 mils.
- 5. Level M171 telescope and quadrant mount.
- 6. Align muzzle bore sight cross hairs on left edge of DAP.
- 7. Set azimuth counter to 3200 mils.
- 8. Align vertical pantel cross hairs on left edge of DAP.
- 9. Loosen two set screws and two lock washers.
- 10. Remove cover.
- 11. Turn slotted eccentric clockwise one quarter turn to disengage azimuth counter.
- 12. Turn azimuth knob clockwise to align vertical crosshairs with left edge of DAP.
- 13. Turn slotted eccentric counter clockwise to engage azimuth counter.
- 14. Using azimuth knob, turn pantel counter clockwise 80 mils.
- 15. Realign vertical pantel cross hairs on left edge of DAP.
- 16. Verify sight picture.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

ADMINISTRATIVE INSTRUCTIONS: Pretested gunners quadrant must be used prior to checking level of trunnions.

DUTY AREA 03 - SECTION CHIEF

TASK: 0811.03.01 (CORE PLUS) PREPARE A HOWITZER FOR FIRING

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CONDITION(S): Given a howitzer, a section crew, an aiming point, a measurable crest, SL-3 equipment, and the references.

STANDARD(S): Per the references, utilizing the memory aid, TLABSPAP.

PERFORMANCE STEPS:

1. Assign tasks to crew members to best accomplish the mission.
2. Accomplish the following steps:
 - a. T - Trails or firing platform properly emplaced.
 - b. L - Lay the weapon.
 - c. A - Emplace the Aiming Point (collimator).
 - d. B - Boresight verified or performed.
 - e. S - Second circle. Verification of lay performed with a second aiming circle.
 - f. P - Prefire checks on weapon system performed.
 - g. A - Ammunition prepared.
 - h. P - Position improvement (Site to crest determined, XO's report rendered, alternate aiming points established, camouflage and defensive hardening of position).
3. Decrease preparation time by performing some steps simultaneously.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
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TASK: 0811.03.02 (CORE PLUS) MEASURE THE ANGLE OF SITE TO CREST AND THE PIECE TO CREST RANGE

CONDITION(S): Given a howitzer, SL-3 gear, an assistant, a sector of fire, a tape, a map, a measurable crest, and the references.

STANDARD(S): Per the references, accurately measuring the angle of site-to-crest to the nearest mil and piece to crest range within 100 meters of the actual location within 3 minutes.

PERFORMANCE STEPS:

1. Measure the angle of site-to-crest.
 - a. Sight along the bottom edge of bore. Traverse the weapon through the range of traverse, until a crest is seen in the tube.
 - b. Elevate the tube until the line of sight just clears the crest.
- NOTE: Perform STEP 1(a) through the entire sector of fire.
- c. Center bubble in elevation vial.
 - d. Center bubble in cross level vial.
 - e. Read the elevation scale to counter to the nearest mil.

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- 2. Measure piece-to-crest range by using one or more of following five methods:
 - a. Use tape (measure) to measure the distance between piece to crest range.

NOTE: This is a more accurate method, but time consuming.
 - b. Use subtense.
 - (1) Establish a base of known length (usually a 2 meter bar or 60 meter base).
 - (2) Measure the angle of that base with the pantel.

NOTE: This method is fast and accurate.
 - (3) Enter subtense tables to determine distance.
 - c. Use map measurement by measuring the distance between the piece and crest on the map.

NOTE: This method is fast and accurate if the crest appears on the map. (For example, a lone tree will not appear on the map.)
 - d. Use pacing to measure the distance between the piece and crest.

NOTE: This is a time consuming method. It depends on the distance and accessibility to the crest.
 - e. Use estimation by observing or visually estimating the distance between the piece and crest.

NOTE: This method is least accurate, but is used when other methods are not feasible.
- 3. Report angle of site to crest and piece to crest range to the XO.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery
- 3. ST 6-50-20, Battery Executive Officer’s/Platoon Leader’s Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.03.04 (CORE PLUS) DETERMINE WHETHER A HOWITZER IS SAFE TO FIRE

CONDITION(S): Given a howitzer that has been laid and is ready to fire, a section crew, a safety "T", a series of fire commands, and the references.

STANDARD(S): Per the references, ensuring the command, "CHECK FIRING", is given when unsafe conditions exist.

PERFORMANCE STEPS:

- 1. Determine whether the data received is safe to fire, using safety ‘T’s.
- 2. Report unsafe data, and state whether unsafe data is outside the deflection limits, above or below the maximum or minimum quadrant, or below minimum safe time.
- 3. Verify that deflection is set correctly.
- 4. Verify that quadrant is set correctly.

5. Verify charge and lot on projectile or propellant.
6. Verify fuze and fuze setting.
7. Verify all safe conditions exist according to Reg Safety SOP.
8. Command, "CHECK FIRING", if any unsafe condition exists.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. JREGTO 3570.1_, Standard Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
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TASK: 0811.03.05 (CORE PLUS) COMPUTE DATA FOR SWEEP AND ZONE FIRE MISSION

CONDITION(S): Given a sweep and zone fire mission, a pencil, paper, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine deflections to be fired for sweep fire.
2. Determine the quadrants to be fired for zone fire.
3. Determine the order in which to fire.
4. Determine the total rounds to be fired.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
-

TASK: 0811.03.06 (CORE PLUS) ISSUE FIRE COMMAND FOR DIRECT FIRE MISSION

CONDITION(S): Given a howitzer, a designated target (stationary or moving), an assistant gunner, and the references.

STANDARD(S): Accurately determining range to target to the nearest 100 meters and issuing initial fire commands distinctly, in the proper sequence, and within 15 seconds of target identification. Subsequent fire commands must be issued within 5 seconds of initial round impacts.

PERFORMANCE STEPS:

1. Issue the initial fire command in the proper sequence.
2. (Gunner) Announce, "FIRE."
3. Announce subsequent commands based on observed effect.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCTM 08198A-10, Operator's Manual for Howitzer, Medium, Towed: 155mm, M198

2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.03.07 (CORE PLUS) VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON A 5-TON TRUCK

CONDITION(S): Given a 5-ton truck, Basic Issue Items (BII), a pen, a completed maintenance form, and the references.

STANDARD(S): Per the references, verifying the performance of all Preventive Maintenance Checks and Services (PMCS) items listed in the PMCS Table 2-2 and ensuring all discrepancies found on the maintenance form are corrected.

PERFORMANCE STEPS:

- 1. Verify Preventive Maintenance Checks and Services (PMCS) are completed according to appropriate TM and LO.
- 2. Verify the maintenance form is annotated correctly.
- 3. Ensure the maintenance form is forwarded to proper personnel for action.
- 4. Verify the proper troubleshooting procedures have been accomplished on the following equipment/systems:
 - a. Engine.
 - b. Heating system.
 - c. Transmission.
 - d. Transfer case.
 - e. Brake air system.
 - f. Wheels, tires, and hubs.
 - g. Steering.
 - h. Special body equipment, referring to M925 with winch truck.
 - i. Special purpose kits.
- 5. Report deficiencies that cannot be corrected.

INITIAL TRAINING SETTING: MOJT Sustainment: 1 Req By: SSgt

REFERENCE(S):

- 1. LO 9-2320-260-12, M809 Series Truck
- 2. LO 9-2320-272-12, Truck, 5-Ton, 6X6, M939 Series
- 3. TM 9-2320-260-10, TRK 5-Ton 6X6 M809 Diesel
- 4. TM 9-2320-272-10, TRK 5-Ton 6X6 M939 Diesel

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System
- 4. 0816, Howitzer Section Chief

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5. 1320, Fundamentals of Diesel Engines (Web)
 6. 1334, Diesel Engine Maintenance
 7. 1335, Fundamentals of Diesel Engines
 8. 3530, Incidental Motor Vehicle Operator
 9. 3532, Incidental Motor Vehicle Operator (CD)
 10. 3580, Automotive Engine Maintenance and Repair
-

TASK: 0811.03.10 (CORE PLUS) PREPARE A HOWITZER SECTION FOR HELICOPTER DISPLACEMENT

CONDITION(S): Given a howitzer with section equipment and personnel, a command to prepare for helicopter displacement, and the references.

STANDARD(S): Per the references, identifying only the gear necessary to accomplish the mission.

PERFORMANCE STEPS:

1. Brief personnel.
2. Identify necessary individual gear.
3. Identify necessary section gear.
4. Assign personnel to carry section gear.
5. Ensure individual weapons are properly handled.
6. Determine sequence of embark/debark.
7. Assign individual seats.
8. Direct internal loading of howitzer if circumstances do not allow for external lift. (For external load procedures, see Tasks 0811.09.17, PREPARE THE HOWITZER AND AMMUNITION FOR EXTERNAL LOAD; 0811.03.21, PREPARE THE HOWITZER FOR EXTERNAL HELICOPTER LIFT.)

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

1. FMFRP 5-31, Helicopter External Air Transport Procedures

DISTANCE LEARNING PRODUCT(S):

1. 0816, Howitzer Section Chief
 2. 0820, The M198 155mm Towed Howitzer
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TASK: 0811.03.12 (CORE PLUS) SUPERVISE DIRECT FIRE, USING THE TWO-MAN TWO-SIGHT TECHNIQUE (M198)

CONDITION(S): Given a howitzer with crew and ammunition in a firing position and the reference.

STANDARD(S): Per the reference, announcing fire commands and obtaining a hit against a target.

PERFORMANCE STEPS:

1. Identify target. (If target consists of several weapons, select target that is the greatest threat.)
2. Give fire commands.

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- 3. Ensure AG determines quadrant of target from range card or direct fire range plate. Determine and announce lead in mils, if appropriate.
- 4. Ensure gunner sights on target per procedures in Task 0811.02.20, CONDUCT DIRECT FIRE WITH THE M100-SERIES PANORAMIC TELESCOPE TWO MAN, ONE SIGHT.
- 5. Ensure AG checks the level vial mirror and adjusts bubble to correct cant.
- 6. Ensure AG uses the direct fire telescope to sight in on target as per Task 0811.02.28, SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE (M198).
- 7. Ensure AG announces, "SET", when correct picture has been established and continues to announce, "SET", as long as correct picture is laid on target.
- 8. Ensure gunner tracks target by traversing tube and commands, "FIRE", after assistant gunner calls, "SET".
- 9. Ensure gunner and AG continue to track and fire on target until it is destroyed.
- 10. Give subsequent fire commands, based on observed effects.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D541	CHG PROP 155MM, WHITE BAG, M4	8.000 EA	8.000 EA	16.000 EA
D544	PROJ 155MM, HE, M107	8.000 EA	8.000 EA	16.000 EA
N286	FUZE M582 MTSQ	4.000 EA	4.000 EA	8.000 EA
N340	FUZE, PD, M739	4.000 EA	4.000 EA	8.000 EA
May use N335, M557 PD SQ/D				
N523	PRIMER, PERCUSSION, M82	8.000 EA	8.000 EA	16.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief
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TASK: 0811.03.14 (CORE PLUS) SUPERVISE DIRECT FIRE, USING THE ONE-MAN ONE-SIGHT TECHNIQUE

CONDITION(S): Given a howitzer in a firing position, a target, a gunner, a fire command, and the reference.

STANDARD(S): Per the references, obtaining a hit against a target.

PERFORMANCE STEPS:

- 1. Perform the supervisory duties associated with the two-man one-sight technique. (See Task 0811.02.20 CONDUCT DIRECT FIRE WITH THE M100-SERIES PANORAMIC TELESCOPE "TWO MAN, ONE SIGHT".

NOTE: Marine must change range into quadrant.
- 2. Ensure gunner lays for both deflection and elevation.
- 3. Ensure gunner sets announced quadrant on auxiliary elevation counter.
- 4. Ensure tube is moved until elevation level bubble is centered.
- 5. Ensure gunner centers cross-level bubble.
- 6. Ensure tube is traversed (with 3200 set on azimuth counter) until crosshair of reticle is on target, or correct lead is established.
- 7. Ensure gunner commands, "FIRE", after correct sight picture is established.

8. Ensure gunner continues to lay on target until destroyed or a subsequent fire command is issued.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

AMMUNITION:

		INITIAL	PER	ANNUAL
DODIC NOMENCLATURE		PROFICIENCY	ITERATION	SUSTAINMENT
D541	CHG PROP 155MM, WHITE BAG, M4	4.000 EA	4.000 EA	8.000 EA
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	8.000 EA
N340	FUZE, PD, M739	4.000 EA	4.000 EA	8.000 EA
	May use N286, M582 MTSQ			
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	8.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.03.15 (CORE PLUS) PREPARE A HOWITZER FOR TRAVEL

CONDITION(S): Given a howitzer in firing position with section gear, ammunition, personnel, a march order, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Issue the command, "March Order."
- 2. Supervise the duties of the section members.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief
- 2. 0820, The M198 155mm Towed Howitzer

TASK: 0811.03.16 (CORE PLUS) PREPARE A HOWITZER TO SHOOT OUT OF NORMAL TRAVERSE LIMITS

CONDITION(S): Given an M198 howitzer and crew, SL-3 gear, collimator, aiming posts, fire commands with a deflection outside of the weapon’s normal traverse limits, during daylight and under cover of darkness, and the reference.

STANDARD(S): Per the reference, ensuring the howitzer is prepared to fire within 6 minutes in lighted conditions and 12 minutes in darkened conditions.

PERFORMANCE STEPS:

- 1. Prepare the M198.
 - a. Locate the appropriate aiming point.
 - b. Apply deflection from FDC to pantel.
 - c. Command, "Speed Shift, Muzzle Right or Muzzle Left."
 - d. Ensure gunner obtains correct sight picture on aiming point and command, "Trails Down."

- e. Direct emplacement of weapon.
- f. Continue to fire mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.03.17 (CORE PLUS) SUPERVISE THE PREPARATION OF A PROJECTILE FOR FIRING

CONDITION(S): Given the components of a complete round of artillery ammunition, SL-3 gear, fire commands, and the reference.

STANDARD(S): Per the references, ensuring authorized artillery ammunition combinations and handling procedures are used.

PERFORMANCE STEPS:

- 1. Identify the four components of a complete round of artillery ammunition.
- 2. Identify proper shell/fuze combination from fire commands.
- 3. Identify proper propellant/projectile combination from fire commands.
- 4. Verify the proper setting of Fuze Time and Variable Time.
- 5. Ensure proper ammunition handling procedures are used.
- 6. Ensure only authorized shell/fuze combinations are prepared for firing.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198
- 2. MCWP 3-16.3, Field Artillery Cannon Battery
- 3. ST 6-50-20, Battery Executive Officer’s/Platoon Leader’s Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.03.18 (CORE PLUS) VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE HOWITZER

CONDITION(S): Given an M198 howitzer, SL-3 gear, a completed maintenance form, a pen, the references, and the lubrication order.

STANDARD(S): Per the references, ensuring all preventive checks and services listed in the Preventive Maintenance Checks and Services Table in the appropriate references are performed and annotating all discrepancies found on the appropriate maintenance form.

PERFORMANCE STEPS:

- 1. Verify performance of equipment checks and services using Preventive Maintenance Checks and Services (PMCS) Tables in Chapters 2 & 3 of the technical manual.
- 2. Determine serviceability of equipment.
- 3. Verify status of equipment and document deficiencies.

- 4. Correct deficiencies, or notify organizational maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 1 Req By: SSgt

REFERENCE(S):

- 1. LO 9-1025-211-13, Howitzer, Medium Towed, 155mm M198
- 2. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System
- 4. 0816, Howitzer Section Chief
- 5. 0820, The M198 155mm Towed Howitzer

TASK: 0811.03.19 (CORE PLUS) VERIFY FIRE CONTROL ALIGNMENT TESTS

CONDITION(S): Given an M198 howitzer, SL-3 gear, section crew, a 5-ton jack, a level surface, three M139 alignment devices, a gunner’s quadrant, and the reference.

STANDARD(S): Per the reference, reporting all discrepancies to organizational maintenance.

PERFORMANCE STEPS:

- 1. Verify the tests of the gunner’s quadrant.
- 2. Verify the on-carriage fire control alignment tests.
- 3. Report discrepancies to organizational maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

TASK: 0811.03.20 (CORE PLUS) VERIFY MAINTENANCE ON THE BREECH MECHANISM AND THE COUNTERBALANCE

CONDITION(S): Given a howitzer breech mechanism that requires servicing, an M198 howitzer (with breechblock closed), tube at 0 mils elevation, field artillery mechanic’s tool kit, cleaning materials, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Monitor the disassembly of the breech mechanism.
- 2. Monitor the cleaning and inspecting of the breech mechanism.
- 3. Monitor the reassembly of the breech mechanism.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System
- 4. 0816, Howitzer Section Chief
- 5. 0820, The M198 155mm Towed Howitzer

TASK: 0811.03.21 (CORE PLUS) PREPARE THE HOWITZER FOR EXTERNAL HELICOPTER LIFT

CONDITION(S): Given the requirement to external lift an M198 howitzer by helicopter, an M198 howitzer, an assistant, and the following equipment: Sling set (40,000-pound capacity) with two additional chains, 8-foot length (10,000 pound capacity) and coupling links or sling set (25,000-pound capacity) with two additional chains, 8-foot length (6,250-pound capacity); Nylon cord, (type III), 550-pound breaking strength; 2-inch adhesive tape, pressure sensitive; Webbing, cotton, 1/4-inch, 80-pound breaking strength; Padding material; Tie-down straps, cargo, CGU-1/B; and Clevis assembly, large, MS 70087-3.

STANDARD(S): Per the reference, properly rigging the M198 in 20 minutes.

PERFORMANCE STEPS:

- 1. Prepare the howitzer using single-point load rigging procedures.
- 2. Prepare the howitzer using dual-point load rigging procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. FMFRP 5-31, Helicopter External Air Transport Procedures

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief
- 2. 0820, The M198 155mm Towed Howitzer

DUTY AREA 04 - PLATOON SERGEANT/LOCAL SECURITY CHIEF

TASK: 0811.04.01 (CORE PLUS) CONDUCT BATTERY CREW SERVED WEAPONS TRAINING

CONDITION(S): Given commander’s guidance, crew served weapons teams, appropriate equipment, references, and access to a training area or range.

STANDARD(S): Per the references, ensuring the training includes the following: Weapon nomenclature and general firing data, weapon disassembly and reassembly, head space and timing (M2.50 Cal only), loading and unloading procedures, issue and receive fire commands (ADDRAC), firing procedures (mounted and dismounted), firing procedures while wearing gas mask, immediate action drills, misfire procedures, zero/qualification of weapon system, and registered/nonregistered range cards.

PERFORMANCE STEPS:

- 1. Review commander’s guidance.
- 2. Review reference materials.
- 3. Develop training outline.

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ENCLOSURE (3)

- a. Determine tasks to be trained.
 - b. Determine sequence of tasks.
 - c. Determine time/space constraints.
 - d. Determine requirements/availability of assistants.
 - e. Determine resources required.
4. Rehearse presentation.
 5. Prepare training site.
 6. Arrange for special requirements (i.e. shade, heat, etc.).
 7. Rehearse and evaluate assistants (if applicable).
 8. Present class.
 9. Allow time for Marines to practice.
 10. Evaluate Marines' performance.
 11. Record and report training completed.
 12. Ensure the battery crew can perform all appropriate Training and Readiness (T&R) events.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-15.1, Machinegun and Machinegun Gunnery

DISTANCE LEARNING PRODUCT(S):

1. 0321, The M240G Machinegunner
2. 0368, The Heavy Machinegun Crewman

ADMINISTRATIVE INSTRUCTIONS: NOTE: Battery crew served weapons teams should be trained to a level of proficiency equal to that of a Marine of Military Occupational Specialty 0331. By training to this level of proficiency, the crew served weapon teams can train the rest of the Marines in the battery on the weapon system.

TASK: 0811.04.02 (CORE PLUS) SET UP AND RECOVER THE M2A2 AIMING CIRCLE

CONDITION(S): Given an area clear of magnetic attractions, a declinated aiming circle in the stowed position, an Orienting Station (OS) or other known point, a plumb bob, an accessory case, and the references.

STANDARD(S): Per the references, setting up and leveling the aiming circle within 2 minutes and recovering it within 1 minute.

PERFORMANCE STEPS:

1. Set up the aiming circle (with tripod) for operation.
 - a. Extend the tripod legs.
 - b. Place the tripod over the point to be occupied.
 - c. Mount the aiming circle head on the tripod.
 - d. Attach the plumb bob, and center it over the Orienting Station (OS).
 - e. Install the night-lighting device, if necessary.
2. Level the aiming circle.

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ENCLOSURE (3)

- a. Use the circular leveling vial (fisheye bubble).
 - b. Check the level.
- 3. Recover the aiming circle.
 - a. Secure the aiming circle head.
 - b. Remove the aiming circle head.
 - c. Recover the tripod.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
- 3. TM 9-1290-262-24, Organizational, Direct Support and General Support Maintenance Manual for Aiming Circle, M2 W/E and M2A2 W/E

TASK: 0811.04.03 (CORE PLUS) LAY THE FIRING BATTERY

CONDITION(S): Given a firing battery, aiming circle and/or M-2 compass, map, an azimuth of fire or aiming point, and the references.

STANDARD(S): Per the references, ensuring an accuracy of 0 mils within the time standards for the weapon system.

PERFORMANCE STEPS:

- 1. Determine the appropriate method of lay, based upon the situation.
- 2. Lay the battery with an aiming circle.
 - a. Grid azimuth method.
 - b. Orienting angle method.
 - c. Howitzer backlay method.
- 3. Lay the battery with the M-2 compass.
 - a. M-2 compass method.
 - b. Distant aiming point method.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

TASK: 0811.04.04 (CORE PLUS) MEASURE THE ORIENTING ANGLE (OA)

CONDITION(S): Given an area free from magnetic attractions, an aiming circle set up and leveled over the Orienting Station (OS), an End of the Orienting Line (EOL) marked with an aiming post at a minimum distance of 100 meters, a howitzer that has just completed registration, an assistant, and the references.

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STANDARD(S): Per the references, using the proper commands, and ensuring the OA is measured to an accuracy of +/- 2 mils.

PERFORMANCE STEPS:

1. Announce, "NUMBER (SO AND SO) REFER, AIMING POINT THIS INSTRUMENT."
2. (Gunner of referred piece) Announce, "NUMBER (SO AND SO), AIMING POINT IDENTIFIED, DEFLECTION (SO MUCH)."
3. Set announced deflection on upper motion.
4. Sight on howitzer using lower motion.
5. Sight on the End of Orienting Line (EOL), using upper motion.
6. Announce to the Fire Direction Center (FDC), "ORIENTING ANGLE (SO MUCH)."

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods
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TASK: 0811.04.05 (CORE PLUS) MEASURE THE AZIMUTH OF THE LINE OF FIRE

CONDITION(S): Given an area free of metal attractions, a situation wherein survey control is not available, a declinated aiming circle which is properly setup and leveled for operation, a howitzer which just completed a registration exercise (simulated/actual), an assistant, and the references.

STANDARD(S): Per the references, using proper commands, and ensuring the azimuth is measured to an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Announce, "NUMBER (SO AND SO) REFER, AIMING POINT THIS INSTRUMENT."
2. (Gunner of referred piece) Announce, "NUMBER (SO AND SO) AIMING POINT IDENTIFIED, DEFLECTION (SO MUCH)."
3. Set the announced deflection on the upper motion.
4. Sight on the howitzer pantel, using the lower motion.
5. Release the magnetic needle and center it using upper motion.
6. Determine the Instrument Reading (IR) on the upper motion. Subtract the value of the IR from the declination constant.
7. Announce, "MEASURED AZIMUTH (SO MUCH)."

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods

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TASK: 0811.04.06 (CORE PLUS) COMPUTE MINIMUM QUADRANT ELEVATION (MIN QE)

CONDITION(S): Given the elements of MIN QE (i.e., the Piece to Crest Range (PCR) and the angle of site); the type, the caliber, the fuze, and the charge of the specific weapons system to be computed; the Minimum Safe Time (MST) and restrictions; the appropriate Graphical Site Table (GST), Tabular Firing Tables (TFT), and rapid fire tables; and the references.

STANDARD(S): Per the references, manually or by applying the rapid fire tables.

PERFORMANCE STEPS:

1. NOTE: If the sum of the vertical angle required to achieve a 5-meter (5m) clearance is > 300 mils, use step-by-step computation. Always round up to whole mils.

Use manual computation to determine lowest elevation.
 - a. Determine angle 1 (angle of site). Use the greatest angle of site to crest reported or measured by all weapons.
 - b. Determine angle 2 (vertical clearance). Divide 5m Vertical Interval (VI) by the Piece-to-Crest Range (PCR), expressed in thousands.
 - c. Determine angle 3 (complimentary angle of site).
 - d. Determine angle 4 (elevation). Use corresponding Piece-to-Crest Range (PCR) from the Tabular Firing Tables (TFT) (Refer to Table F).
 - e. Determine the fork value of angle 5 (margin of safety). Multiply the value in the Tabular Firing Tables (TFT) by 2 at the corresponding Piece-to-Crest Range (PCR) (forks x 2).
2. Use rapid fire tables to determine lowest elevation.
 - a. Determine angle of site to crest.
 - b. Enter rapid fire tables at the Piece-to-Crest Range (PCR) with weapons system and fuze to be computed. Use verified PCR (the horizontal distance expressed to the nearest 100m).
- c. Add angle of site to elevation corresponding to Piece-to-Crest Range (PCR).

NOTE: Minimum Quadrant Elevation (Min QE) must be computed for each weapon.
3. Compute Minimum Quadrant Elevation (MIN QE) for every charge to be fired.
4. Compute Minimum Quadrant Elevation (MIN QE) for every new position.
5. During combat, compute Minimum Quadrant Elevation (MIN QE) for each 800 mil sector.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0811.04.07 (CORE PLUS) MEASURE DISTANCE, USING THE SUBTENSE METHOD

CONDITION(S): Given an aiming circle, an M16A2, 2 meter bar, 60 meter base (comm wire), an assistant, and the references.

STANDARD(S): Accurately, per the references.

PERFORMANCE STEPS:

1. Determine distance using the M16A2 rifle.

- 2. Determine distance using the 2 meter bar.
- 3. Determine distance using the 60 meter base.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
 - 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0811.04.08 (CORE PLUS) DECLINATE THE AIMING CIRCLE

CONDITION(S): Given an area free of magnetic attractions, a serviceable aiming circle, tape, notation pad, a surveyed declination station, at least two surveyed azimuth markers (preferably placed in opposite directions and distanced at 1,000 meters from the station).

STANDARD(S): Per the references, accurately recording the information.

PERFORMANCE STEPS:

- 1. Set up and level the aiming circle over declination station.

NOTE: Ensure an appropriate distance from magnetic distractions.

High tension lines	55m
Vehicles/railroad	10m
Wire/barbed fences	10m
Helmets (small metal items)	0.5m

CAUTION: Remove watches with radioactive luminous dials, Marine Corps issue watches, or timepieces with magnetic bezel backs.

- 2. Set the known azimuth to the first azimuth marker (upper motion).
- 3. Sight on the first azimuth (lower motion).
- 4. Release and center the magnetic needle (upper motion).
- 5. Read declination constant and announce the reading to the nearest 0.5 mil.
- 6. Lock the magnetic needle (when not in use).
- 7. Set the known azimuth to the second azimuth marker (upper motion). Use second azimuth marker. If second azimuth marker is unavailable, use first marker again.
- 8. Repeat sequence of STEPS 3 through 6.
- 9. Add the readings and divide by 2 when two azimuth markers are used.
- 10. Write declination constant on tape, and place on aiming circle. On the notation pad, record four-digit mean declination constant, date, and initialize the performance.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
 - 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0811.04.09 (CORE PLUS) DECLINATE THE M2 COMPASS

CONDITION(S): Given an area free from magnetic attractions, a serviceable M2 compass, a surveyed declination station, surveyed azimuth marker, a nonmagnetic screw driver, and the references.

STANDARD(S): Per the references, ensuring the sight picture is correct and the reading matches the survey.

PERFORMANCE STEPS:

- 1. Set M2 compass on aiming circle M24 tripod over the orienting station.

NOTE: Ensure an appropriate distance from magnetic distractions.

High tension lines 55m

Vehicles/railroad 10m

Wire/barbed fences 10m

Helmets (small metal items) 0.5m

CAUTION: Remove watches with radioactive luminous dials, Marine Corps issue watches, or timepieces with magnetic bezel backs.

- 2. Center bubble in circular vial.
- 3. Sight on known azimuth.
- 4. Using nonmagnetic screw driver, rotate the azimuth scale until south-seeking black arrow indicates the surveyed azimuth is equal to the known azimuth.
- 5. Recheck sight picture and azimuth to known point.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0811.04.10 (CORE PLUS) MEASURE THE VERTICAL ANGLE (VA)

CONDITION(S): Given an aiming circle with tripod, a scenario allowing no time for advance party preparations, a location approximately 50 meters from the aiming circle, an assistant, and the references.

STANDARD(S): Per the references, measuring the Vertical Angle (VA) within +/- 1 mil.

PERFORMANCE STEPS:

- 1. Set up and level aiming circle.
- 2. Using the elevation knob; level the upper tubular vial.
- 3. Read and record the reading and correction factor on the elevation scale.

NOTE: If black numbers are visible, the correction factor is plus. If red numbers are visible, the correction factor is minus.

- 4. Elevate or depress the telescope to align crosshairs of the aiming circle against chest of the gun guide.
- 5. Read and record the value of the reading on the elevation scale to the nearest 1 mil.
- 6. Subtract the correction factor obtained in STEP 3 from the value obtained in STEP 5. (The result is the Vertical Angle (VA) for the howitzer.)

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
 2. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0811.04.11 (CORE PLUS) MAINTAIN THE M2A2 AIMING CIRCLE

CONDITION(S): Given an aiming circle, necessary cleaning materials, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Clean the aiming circle.
2. Apply lubrication.
3. Perform level vial check.
4. Perform magnetic needle check.
5. Perform tilted reticle check.
6. Protect circle from shock.
7. Keep the circle dry.
8. Keep the magnetic needle locked when it is not in use.
9. Keep the circle head cover over the circle head whenever it is not in use.
10. Cover all leveling vials.
11. Rotate azimuth knob until it is over the notation pad before trying to replace the head cover.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
 2. TM 9-1290-262-10, Operator's Manual for M2A2 Aiming Circle
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TASK: 0811.04.12 (CORE PLUS) CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION

CONDITION(S): Given battery vehicles, weapons, a fully equipped advance party, a map, a compass, the requirement to select and prepare the unit's next position, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Plan for the reconnaissance.
 - a. Remain able to perform the mission with minimal degradation.
 - b. Learn the current enemy situation regarding disposition, intention, and capabilities of enemy forces.
 - c. Analyze the routes to be used, and the time and distance required to make the move.
 - d. Consider the strength and availability of the current troops.

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- e. Analyze the effects of the weather on the terrain to be crossed.
2. Perform reconnaissance, using appropriate method(s).
 - a. Map reconnaissance.
 - b. Air reconnaissance.
 - c. Ground reconnaissance.
3. Select positions.
 - a. Brief key personnel on movement information.
 - b. Determine the suitability of the route of the unit movement based upon the information obtained from the ground reconnaissance.
 - c. Select a primary position. (The primary position is the position from which the battery will accomplish its assigned mission.
 - d. Select an alternate position to which the battery moves in case its primary becomes untenable.
 - e. Select a supplementary position for accomplishment of a specific mission.

NOTE: The selections of these positions are made with reference to such factors as mission, communications, defilade, defensibility, trafficability, weather, and survey control.

f. Decide the type of formations of the howitzers, such as dispersion, movement, hardening and concealment, track plan, and occupying from front or rear.

4. Occupy position with the advance party.
5. Prepare position for main body occupation.
 - a. Conduct a security sweep of the position.

b. Determine the battery formation and howitzer positions within the position based upon METT-TS-L.

NOTE: Howitzers should be no closer than 50 meters from each other, should form nonlinear array, and should present a deceptively larger element.

c. Ensure the gun guides know the azimuth of fire, the location of the aiming circle and terminal box for the hot loop, and location of the pickup point.

d. Determine the location of FDC, antenna farm, communications site, ammunition vehicles, and other support vehicles.

e. Ensure all advance party representatives know the location of their respective area selected, the pickup point, and the desired track plan.

f. Ensure the local security chief provides adequate protection for the advance party as they go about preparing the position for occupation.

g. Assign someone to set up the aiming circle and measure rough deflection, distance, and vertical angle to the proposed gun positions. Determine XO's minimum QE using the M2 compass, if time permits.

h. Improve the position (harden) until the main body arrives in position. Plan for the defense of position.

i. Assemble the guides at the pickup point as the main body nears the position, and complete the occupation.

j. At night, mark key positions, as dictated by unit SOP. Practice noise and light discipline.

k. Continue to improve the position and practice continuing actions.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0321, The M240G Machinegunner
2. 0332, Reconnaissance Marine
3. 0335, Infantry Patrolling
4. 034, Landmine Warfare, Demolitions, and Breaching Operations
5. 0365, Anti-Armor Operations
6. 0368, The Heavy Machinegun Crewman
7. 0370, The Marine Rifleman: Combat Skills
8. 0372, The Marine Rifleman: Weapons
9. 0380, Infantry Squad Leader: Combat Leadership
10. 0381, Land Navigation
11. 0382, Infantry Squad Leader: Weapons and Fire Support
12. 0385, Land Navigation (Web)
13. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
14. 3503, Motor Transport NCO: Combat Operations
15. 3530, Incidental Motor Vehicle Operator
16. 3532, Incidental Motor Vehicle Operator (CD)
17. 571, NBC Individual Survival Measures
18. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook
3. Chemical Warfare
4. Laying Methods & Hasty Survey Methods

TASK: 0811.04.13 (CORE PLUS) PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: Low-angle fuze quick artillery crater; Usable fuze furrow; Declinated aiming circle, M2 compass (preferred), or a lensatic compass; D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation.); WD-1 (communication wire) or a length of rope, wire, or string; Map of local area; Plotting equipment.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Perform crater analysis for low-angle fuze quick craters.
2. Perform crater analysis for low-angle fuze delay craters.
3. Make the proper report to S-2.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCWP 3-16.1, Marine Artillery Support
3. MCWP 3-16.3, Field Artillery Cannon Battery
4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence

ADMINISTRATIVE INSTRUCTIONS: The two methods of obtaining a direction to a hostile weapon from a low-angle fuze quick crater are the fuze furrow/center-of-crater method and the sidespray method. For best results, take the average of several directions, using both methods.

TASK: 0811.04.14 (CORE PLUS) PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: Usable high-angle crater; Declinated aiming circle, M2 compass (preferred), or a lensatic compass; D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation.); WD-1 (communication wire) or a length of rope, wire, or string; Map of local area; Plotting equipment.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify crater formed by high-angle shell by looking for a deep fuze tunnel and back spray.
2. Determine grid of the crater.
3. Determine direction to hostile weapon using one of the following:
 - a. Splinter groove method.
 - b. Main axis method.
 - c. Fuze tunnel method.
4. Make the proper report to S-2.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCWP 3-16.1, Marine Artillery Support
3. MCWP 3-16.3, Field Artillery Cannon Battery
4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

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DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
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TASK: 0811.04.15 (CORE PLUS) PERFORM SHELL FRAGMENT ANALYSIS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: Curvature template (to scale); DIA Projectile Fragmentation Identification Guide; Dividers and a ruler; Fragments and pieces of the projectile.

STANDARD(S): Per the references, accurately reporting the information.

PERFORMANCE STEPS:

- 1. Collect and analyze shell fragments.
 - a. Determine the type of shell (e.g., mortar, rocket, artillery).
 - b. (Low order burst or dud) Determine caliber of shell using curvature template.
 - c. (High order burst) Determine caliber of shell using pieces of fins, rotating bands, or gas check bands and referring to the DIA Projectile Fragmentation Identification Guide.
- 2. Tag usable fragments. Tag must contain:
 - a. Location of crater.
 - b. Direction to hostile weapon.
 - c. Date-time group of shelling.
- 3. Send information and shell fragments to commander, FDC, or S-2.
- 4. Make the proper report to S-2.
 - a. Report grid location.
 - b. Report direction to firing guns.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. MCWP 3-16.1, Marine Artillery Support
- 3. MCWP 3-16.3, Field Artillery Cannon Battery
- 4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
-

TASK: 0811.04.16 (CORE PLUS) ESTABLISH AN ADVANCE PARTY

CONDITION(S): Given a firing battery and the references.

STANDARD(S): Per the references, ensuring all personnel are equipped properly and able to displace to the new position.

PERFORMANCE STEPS:

- 1. List the personnel required in an advance party.

- 2. List the primary duties of advance party personnel.
- 3. List the equipment required by an advance party.
- 4. Displace the advance party to the new position.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0380, Infantry Squad Leader: Combat Leadership

TASK: 0811.04.17 (CORE PLUS) PLAN THE DEFENSE OF A FIELD ARTILLERY UNIT

CONDITION(S): Given a battery that has just occupied a new position, personnel with all T/E gear and section gear, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Supervise priority of work.
 - a. Post security.
 - b. Position automatic weapons.
 - c. Clear of fields of fire.
 - d. Construct positions and emplacements.
 - e. Prepare supplementary positions.
 - f. Construct obstacles.
 - g. Improve camouflage.
- 2. Ensure the following critical actions occur:
 - a. Inspect range card for every crew-served weapon, to include howitzers.
 - b. Choose crew-served weapons positions assigning sectors of fire that ensure interlocking fields of fire. Assign final protective lines of fire or principal directions of fire.
 - c. Plan a 360 degree defense.
 - d. Plan and supervise local security patrols.
 - e. Plan and supervise preparation for defense against air attack.
 - f. Prepare the defensive diagram.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
- 2. 0321, The M240G Machinegunner

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3. 0335, Infantry Patrolling
 4. 034, Landmine Warfare, Demolitions, and Breaching Operations
 5. 0365, Anti-Armor Operations
 6. 0368, The Heavy Machinegun Crewman
 7. 0370, The Marine Rifleman: Combat Skills
 8. 0372, The Marine Rifleman: Weapons
 9. 0380, Infantry Squad Leader: Combat Leadership
 10. 0382, Infantry Squad Leader: Weapons and Fire Support
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DUTY AREA 05 - BATTERY GUNNERY SERGEANT

TASK: 0811.05.01 (CORE PLUS) EMPLOY THE HASTY SURVEY TECHNIQUES FOR DIRECTIONAL AND POSITIONAL CONTROL

CONDITION(S): Given a tactical scenario involving the absence of accurate survey data; an available survey team requiring unit survey control; aiming posts; a map; the references; and the following equipment: an M2A2 aiming circle complete with filter and Polaris 2 reticle pattern, communications with a flank station, identifiable celestial bodies (day or night), a station with a known azimuth to an azimuth mark, a pencil and paper to plan a directional traverse, a grid sheet, overlay paper, standard FDC plotting equipment, coordinates of a known point and the direction to an azimuth mark, equipment to be used when determining distance using the subtense method, subtense tables, an AN/GVS-5, BCS with job aids, and BUCS with job aids and survey chip.

STANDARD(S): Per the references, employing the technique most appropriate to the situation.

PERFORMANCE STEPS:

1. Employ GPS (if so equipped) to obtain directional and positional control upon occupation, prior to employing any hasty survey techniques.
2. Evaluate the situation and employ one of the following methods to obtain directional control:
 - a. Hasty simultaneous observation.
 - b. Polaris-Kochab method.
 - c. The Polaris 2 method.
 - d. The directional traverse method.
 - e. Backup Computer System (BUCS) resection.
 - f. Backup Computer System (BUCS) astronomical observation.
3. Evaluate the situation and employ one of the following methods to obtain positional control:
 - a. Graphic resection.
 - b. Graphic traverse.
 - c. Backup Computer System (BUCS) resection.
 - d. Trilateration with AN/GVS-5
4. Determine height.
5. Employ Backup Computer System (BUCS) or Battery Computer System (BCS) when conducting either directional or graphic traverse, as appropriate.

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INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. ST 6-40-2, Battery Computer System BCS Job Aids
- 3. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
- 4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
- 5. TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods
-

TASK: 0811.05.02 (CORE PLUS) PREPARE THE EXECUTIVE OFFICER'S (XO'S) REPORT

CONDITION(S): Given a firing battery that has been laid, administrative materials, and references.

STANDARD(S): Per the references, ensuring the accuracy of the required information.

PERFORMANCE STEPS:

- 1. Verify the lay of the battery.
- 2. List the primary information in the XO's report by using the memory aid L-A-M-P-S.
 - a. L - Battery is laid.
 - b. A - Azimuth of fire, orienting angle, common deflection (DF).
 - c. M - XO's minimum QE.
 - d. P - Piece distribution.
 - e. S - Separate Ammunition: Ammunition type, lot, weight, propellant temperature, and quantity.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
 - 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 - 3. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook
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TASK: 0811.05.03 (CORE PLUS) DISPOSE OF UNUSED POWDER INCREMENTS

CONDITION(S): Given unused powder increments to be burned, matches, fire-fighting equipment, references, and Marines to provide safety for the fire.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Select a burning site.
- 2. Determine wind direction.

3. Emplace and burn the powder increments.
4. Ensure the powder trail is lit from the farthest downwind direction (i.e., it burns into the wind.)
5. Ensure fire-fighting equipment and Marines are present to control the fire.
6. Ensure the burning of powder is done in a manner that does not compromise your position.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
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TASK: 0811.05.04 (CORE PLUS) LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY

CONDITION(S): Given a platoon/battery in convoy, a request for immediate fire support, a map, a range-azimuth fan, a Tabular Firing Table (TFT), a Backup Computer System (BUCS) and/or Battery Computer System (BCS), and a Call For Fire (CFF).

STANDARD(S): Per the references, with accurate firing data.

PERFORMANCE STEPS:

1. Monitor your position while on the move, constantly selecting possible emergency firing positions by map and visual reference.
2. Receive the Call For Fire (CFF) and authenticate the mission.
3. Ensure the Fire Direction Center (FDC) monitors the mission.
4. Notify the driver, and signal the convoy that a HIP SHOOT is about to take place.
5. Select the position, and notify the Fire Direction Center (FDC) of the proposed grid coordinates.
6. Determine the best method to lay the unit, and lay the unit.
7. Set up the aiming circle to the side or rear of the weapons (Note - When choosing aiming circle location, consider line of metal. Placing the aiming circle in front of gunline will prohibit firing during laying.)
8. Ensure the Fire Direction Center (FDC) determines the azimuth of fire and computes the initial data while the battery is being laid.
9. Ensure the vehicles, excluding the prime movers and Fire Direction Center (FDC), disperse to provide security for the battery.
10. Determine subsequent corrections and complete the fire mission.
11. Improve the position or march order.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. TFT's and Addendums
2. MCWP 3-16.3, Field Artillery Cannon Battery
3. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods
-

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TASK: 0811.05.05 (CORE PLUS) UPDATE UNIT COMMANDER’S RECORD (NAVMC 10558A)

CONDITION(S): Given NAVMC 10558A, a Tabular Firing Table (TFT), pencils, a record of battery rounds fired (type and charge)(DA FORM 4513), and the references.

STANDARD(S): Per the reference, accurately updating all required entries.

PERFORMANCE STEPS:

1. Enter the date of firing in Column 1.
2. Record the projectile type and the model of round fired in Column 2.
3. Record the zone or charge fired in Column 3.
4. Record the rounds fired (by charge) in Column 4A.
5. Compute Equivalent Full Charge (EFC) for each charge, and record the value in Column 4B.
6. Compute the cumulative rounds fired in Column 5A by adding the rounds fired (Column 4A).
7. Compute the cumulative Equivalent Full Charge (EFC) rounds fired in column 5B by adding the EFC rounds fired (Column 4B).
8. Go to previous page and record the accumulative total rounds (Column 6A).
9. Go to the previous page and record the accumulative total of Equivalent Full Charge (EFC) (Column 6B).
10. Add 5A to 6A and record the accumulative total (Column 7A).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

DISTANCE LEARNING PRODUCT(S):

1. 0414, Ground Maintenance Management Procedures for Supervisors
2. 0416, The Marine Corps Publications and Directives System

TASK: 0811.05.06 (CORE PLUS) DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT

CONDITION(S): Given a battery that has just occupied a position, a partially completed defensive diagram, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select the appropriate course of action, based upon the tactical scenario.
2. Establish the plan for the defense.
3. Supervise the execution of the defensive plan.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence

2. 0321, The M240G Machinegunner
 3. 0335, Infantry Patrolling
 4. 034, Landmine Warfare, Demolitions, and Breaching Operations
 5. 0365, Anti-Armor Operations
 6. 0368, The Heavy Machinegun Crewman
 7. 0370, The Marine Rifleman: Combat Skills
 8. 0372, The Marine Rifleman: Weapons
 9. 0380, Infantry Squad Leader: Combat Leadership
 10. 0382, Infantry Squad Leader: Weapons and Fire Support
 11. 571, NBC Individual Survival Measures
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TASK: 0811.05.07 (CORE PLUS) SUPERVISE A BATTERY DISPLACEMENT

CONDITION(S): During daylight and under cover of darkness, given an emplaced battery that has received a warning order to displace, a compass, binoculars, a map, writing material, a movement order, and the references.

STANDARD(S): Per the references, ensuring an appropriate movement order is issued.

PERFORMANCE STEPS:

1. Prepare for displacing a battery.
2. Organize and dispatch the advance party.
3. Issue the command, "PREPARE TO MARCH ORDER".
4. Develop the method of march (open column, close column, infiltration, or terrain march).
5. Plan for the following march column contingencies during displacement:
 - a. Air attack.
 - b. Ground attack.
 - c. Artillery attack.
 - d. Enemy roadblock.
6. Issue the movement order. (NOTE: Format found in ST 6-50-20.)

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. FM 6-20-1 (HTF), Field Artillery Cannon Battalion
2. MCWP 3-16.3, Field Artillery Cannon Battery
3. SL-3-00098A, Meteorological Set, Manual, AN/TMQ-7
4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

1. 0380, Infantry Squad Leader: Combat Leadership
2. 0381, Land Navigation
3. 0385, Land Navigation (Web)

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4. 3503, Motor Transport NCO: Combat Operations

TASK: 0811.05.08 (CORE PLUS) SUPERVISE A TACTICAL ROAD MARCH

CONDITION(S): Given a unit that has been issued movement orders, a scenario wherein the enemy is employing a broad spectrum of air, ground, and target acquisition assets, during daylight and under cover of darkness, and the references.

STANDARD(S): Per the references, correctly conducting open and close column movement, tactical infiltration, and terrain marches.

PERFORMANCE STEPS:

1. Ensure the types of displacement, march column interval, and march column configuration maximize passive and active defense measures.
2. Ensure the start point is crossed on time, report is submitted to higher headquarters when crossing check points, and a release point is designated (if operating independently).
3. Cross release point on time.
4. Maintain march discipline.
5. Maintain proper convoy interval.
6. Execute appropriate immediate action drill when convoy comes under attack by air, ground, and/or artillery/rocket/missiles.
7. Organize march column so dispersion of available automatic weapons provides for delivery of a heavy volume of fire against ground/air attacks in all directions.
8. Maintain 360 degree security while on the march with any available automatic weapons being mounted and assigned a sector of fire.
9. Prepare vehicles appropriately for convoy defense (canvas up, sand bagged, etc.).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. FMFM 4-9, Motor Transport
2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 0380, Infantry Squad Leader: Combat Leadership
2. 0381, Land Navigation
3. 0385, Land Navigation (Web)
4. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
5. 3503, Motor Transport NCO: Combat Operations
6. 3530, Incidental Motor Vehicle Operator
7. 3532, Incidental Motor Vehicle Operator (CD)
8. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
 2. AN/PSN-11 PLGR Handbook
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TASK: 0811.05.09 (CORE PLUS) DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT

CONDITION(S): Given maintenance management directives, artillery unit maintenance management personnel, artillery Daily Process Report (DPR), Equipment Repair Order (ERO), Equipment Repair Order Shopping List (EROSL), LM2 Report, T/O cover letter, T/E, Publications listing (PL), a CMR, and references.

STANDARD(S): Per the references, ensuring the unit's overall supply maintenance status is 80% or higher.

PERFORMANCE STEPS:

1. Ensure proper maintenance is performed at each echelon.
 - a. Preventive.
 - b. Scheduled.
 - c. Corrective.
2. Ensure maintenance records are current and properly maintained.
3. Ensure proper usage of maintenance management forms for the requisition of repair parts.
4. Ensure technical skills of maintenance personnel are commensurate with unit's echelon of repair and equipment allowances.
5. Manage MIMMS/SASSY interface for the artillery unit.
 - a. Review Daily Process Report (DPR) for status of equipment.
 - b. Review LM2 reports.
6. Review and update PL. (Coordinate with the S-1.)
7. Inspect maintenance management program ensuring adherence to applicable directives.
8. Conduct inspections to determine adequacy of maintenance programs.
9. Review and inspect calibration program established by the MMO.
10. Review and inspect modification program established by the MMO.
11. Review and inspect tool control procedures established by the MMO.
12. Review and inspect publication control procedures established by the S-1.
13. Review Daily Process Report (DPR)/Equipment Repair Order (ERO)/Equipment Repair Order Shopping List (EROSL) with the MMO.
14. Ensure the parts required for equipment maintenance match the parts actually on order.
15. Review status of parts on order.
16. Assist in CMR management, as required.
 - a. Ensure DD-1348s for ORF gear get to Battery Commander/Executive Officer for CMR.
 - b. Ensure DD-1348s for turn-in/receipt of gear get to Battery \ Commander/Executive Officer for CMR.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. FMFRP 4-15, Commanders Guide to

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- 2. MCO P4790.1B, Marine Corps Integrated Maintenance Management System Introduction
- 3. MCO P4790.2B, MIMMS Field Procedures Manual
- 4. MCO P5215.17, The USMC Tech Pub System
- 5. MCO P5600.31, Marine Corps Publications and Printing Regulations
- 6. NAVMC 2761, Catalog of Publications
- 7. TM 4700-15/1, Equipment Record Procedures
- 8. UM 4400-124, FMF SASSY Using Unit Procedures
- 9. UM 4790-5, MIMMS (AIS) FMSS

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System
- 4. 1330, Basic Shop Fundamentals for the Mechanic

TASK: 0811.05.10 (CORE PLUS) COORDINATE LOGISTICS

CONDITION(S): Given a scenario involving a unit conducting tactical operations and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Adhere to logistics and maintenance management Standing Operating Procedures (SOPs).
- 2. Consider the logistics functions in the development of tactical plans.
- 3. Include attached elements in all logistical planning.
- 4. Comply with basic loads established by higher headquarters.
- 5. Maintain dispersion between materiel and ammunition within positions.
- 6. Submit logistics reports, per Standing Operating Procedures (SOP).
- 7. Conduct Preventive Maintenance (PM) and Corrective Maintenance (CM) in a field environment.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

- 1. FMFM 4-1, Combat Service Support Operations
- 2. MCWP 3-16.1E, Combat Service Support for Artillery Units

DISTANCE LEARNING PRODUCT(S):

- 1. 045, The Logistics/Embarkation Specialist

TASK: 0811.05.11 (CORE PLUS) MAINTAIN CLASS V SMALL-ARMS AMMO BASIC LOAD AND SUPPLIES

CONDITION(S): Given appropriate small arms ammunition and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Adhere to established Standing Operating Procedures (SOPs).
2. Ensure small arms Basic Load (BL) are maintained for all equipment.
3. Forecast and submit requisitions to maintain the Required Supply Rate (RSR).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. MCO 8010.1E, Class V Planning Factors for Fleet Marine Force Combat Operations
 2. MCWP 3-16.1E, Combat Service Support for Artillery Units
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TASK: 0811.05.12 (CORE PLUS) SUPERVISE THE PICKUP AND DELIVERY OF DESIGNATED CLASSES OF SUPPLY

CONDITION(S): Given supplies requiring distribution, the appropriate equipment, and references.

STANDARD(S): Per the references, ensuring the proper supplies are delivered and issued to the correct units in a secure and timely manner.

PERFORMANCE STEPS:

1. Obtain supplies from authorized sources.
2. Maintain appropriate security to prevent loss, damage, or theft.
3. Ensure timely schedule of delivery to minimize the probability of contamination or spoilage.
4. Make delivery to proper battery elements, as directed by requisitions.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

1. MCWP 3-16.1E, Combat Service Support for Artillery Units
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TASK: 0811.05.13 (CORE PLUS) DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA

CONDITION(S): Given an artillery unit, a requirement from higher headquarters to cross a radiologically contaminated area, an NBC 5 Report or a contamination overlay, a tactical map, rediacmeter(s) with operator(s), commander established Operational Exposure Guidance (OEG), and the references.

STANDARD(S): Per the references, ensuring the least possible contamination to personnel and equipment.

PERFORMANCE STEPS:

1. Use NBC 5 report or contamination overlay to plot hazard area on map.
2. Determine best route.
3. Provide advance party or reconnaissance team with turnback dose and Operational Exposure Guidance (OEG), and send them ahead to reconnoiter.
4. Provide additional shielding to vehicles, if possible.
5. Provide personnel with as much protection from dust as possible.
6. Guide unit across contaminated area while employing contamination avoidance techniques.

- 7. Conduct radiological monitoring.
- 8. Ensure Operational Exposure Guidance (OEG), is not exceeded.
- 9. Determine level of contamination after clearing contaminated area.
- 10. Establish decontamination priorities and perform decontamination.
- 11. Report total dose information to higher headquarters.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: GySgt

REFERENCE(S):

- 1. FM 3-100, NBC Operations
- 2. FM 3-3, NBC Contamination Avoidance
- 3. FM 3-4, NBC Protection
- 4. FM 3-5, NBC Decontamination

DISTANCE LEARNING PRODUCT(S):

- 1. 571, NBC Individual Survival Measures
- 2. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare

ADMINISTRATIVE INSTRUCTIONS: For training purposes, contamination will be simulated.

TASK: 0811.05.14 (CORE PLUS) SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT

CONDITION(S): Given an artillery unit, the requirement for hasty decontamination (MOPP gear exchange and vehicle washdown), and the references.

STANDARD(S): Per the references, ensuring nearly all liquid or solid contamination is removed from personnel and gross contamination is removed from equipment.

PERFORMANCE STEPS:

- 1. Select hasty decontamination site.
 - a. Select site appropriate to the mission.
 - b. Select site with at least two routes into and out of area.
 - c. Select site with adequate water supply (about 100 gallons per vehicle).
 - d. Select site with good overhead concealment.
- 2. Supervise preparation of hasty decontamination site.
 - a. Ensure MOPP gear exchange is set up to run concurrently with vehicle washdown.
 - b. Ensure vehicle washdown is established.
- 3. Supervise MOPP gear exchange.
 - a. Establish liaison with Marine in charge of conducting the MOPP gear exchange.
 - b. Ensure adequate sets of replacement MOPP gear are on hand.
 - c. Ensure Marines are paired into buddy teams.

- d. Ensure MOPP gear exchange procedures are briefed and demonstrated.
 - e. Stop procedures any time it is suspected that contamination has spread to skin or undergarments. Decontaminate Marine with M258A1 decontamination kit and then proceed with gear exchange.
 - f. Conduct exchange.
4. Supervise vehicle washdown.
- a. Establish liaison with Marine in charge of the decontamination team.
 - b. Establish site control.
 - c. Ensure crews prepare vehicles/equipment. (Close all access doors, hatches, windows, and other openings. Ensure muzzle covers are on weapons.)
 - d. Ensure crews maintain tactical awareness while participating in decontamination.
 - e. Ensure vehicles are washed with hot, soapy water for 2 to 3 minutes.
5. Reduce MOPP level, if warranted.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: GySgt

REFERENCE(S):

- 1. FM 3-5, NBC Decontamination
- 2. MCIO P1500.44C, Battle Skills Training/Essential Skills Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 5710, NBC Decontamination Team Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare

TASK: 0811.05.15 (CORE PLUS) SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT

CONDITION(S): Given an artillery unit, the requirement to conduct deliberate decontamination (detailed troop decontamination and detailed equipment decontamination), and the references.

STANDARD(S): Per the references, ensuring contamination on personnel and equipment is below the negligible risk level.

PERFORMANCE STEPS:

- 1. Coordinate time of arrival, supplies, equipment, personnel support to be furnished by the contaminated unit, and estimated time of completion with decontamination team leader.
- 2. Request route clearance to deliberate decontamination site assembly area.
- 3. Send advance party, with personnel to augment decontamination team, to site.
- 4. Direct unit movement of main body to assembly area and organize for decontamination.
- 5. Ensure all personnel are familiar with the contamination control lines.
- 6. Begin vehicle/equipment decontamination.
 - a. Ensure vehicles/equipment are processed through the detailed equipment decontamination site.

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- b. Ensure equipment is monitored for residual contamination.
- 7. Begin personnel decontamination.
 - a. Station 1: Individual gear decontamination.
 - b. Station 2: Overboot and hood decontamination.
 - c. Station 3: Overgarment removal.
 - d. Station 4: Overboot and glove removal.
 - e. Station 5: Monitor for contamination on personnel.
 - f. Station 6: Mask removal.
 - g. Station 7: Mask decontamination.
 - h. Station 8: Reissue of clean equipment/gear to each individual.
- 8. Reorganize unit in a clean area upwind of decontamination site.
- 9. Adjust MOPP level, as appropriate, and resume mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: GySgt

REFERENCE(S):

- 1. FM 3-5, NBC Decontamination

DISTANCE LEARNING PRODUCT(S):

- 1. 5710, NBC Decontamination Team Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare

ADMINISTRATIVE INSTRUCTIONS: For training evolutions, water should be used, vice DS2.

TASK: 0811.05.16 (CORE PLUS) SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR A NUCLEAR ATTACK

CONDITION(S): Given a unit mission, a warning of an impending nuclear attack, a tactical situation, an artillery unit, and the references.

STANDARD(S): Per the references, making maximum use of terrain masking features and passive defense measures.

PERFORMANCE STEPS:

- 1. Identify backup command and control procedures.
- 2. Alert all other units in area.
- 3. Remove any food, water, ammunition, etc., stored outside and place it inside a hardened area, if possible.
- 4. Remove antennas and any other electronic equipment, if applicable, and store inside the vehicle or other hardened location.
- 5. Direct sections to secure all loose gear.
- 6. Position howitzers, if possible, so muzzles are oriented directly away from expected direction of blast. Unlock brakes and ensure transmission, if applicable, is in neutral.
- 7. Ensure all hatches and outside accesses are closed, dogged, and sealed.

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- 8. If situation permits, leave the area of the imminent blast as quickly as possible. Otherwise, continue mission.
- 9. If situation will not permit leaving the area, harden the gun positions as much as possible.
- 10. If situation permits, move howitzers and other vehicles into gullies, in rock outcroppings, hillside area, etc.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: GySgt

REFERENCE(S):

- 1. FM 3-100, NBC Operations
- 2. FM 3-3, NBC Contamination Avoidance
- 3. FM 3-4, NBC Protection

DISTANCE LEARNING PRODUCT(S):

- 1. 571, NBC Individual Survival Measures
- 2. 5710, NBC Decontamination Team Procedures
- 3. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare
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TASK: 0811.05.17 (CORE PLUS) SUPERVISE EMBARKATION

CONDITION(S): Given an artillery unit designated as a landing element of a larger force, available shipping to conduct an amphibious assault, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Coordinate with the Marine Air Ground Task Force (MAGTF) Ground Combat Element (GCE) embarkation officer, and other embarkation officers/movement officers, as appropriate.
- 2. Determine the unit's transportation lift requirements.
- 3. Ensure all material is properly marked, packaged, manifested, and loaded for embarkation.
- 4. Conduct embarkation inspections.
- 5. Prepare and execute embarkation/movement plans.
- 6. Provide security for material during embarkation.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: GySgt

REFERENCE(S):

- 1. CFR-46, Shipping
- 2. CFR-49, Transportation
- 3. FMFM 4, Combat Service Support
- 4. FMFM 4-6, Air Movement of FMF Units
- 5. FMFM 4-9, Motor Transport

- 6. LFM 03, Amphibious Embarkation
- 7. NAVSEA OP 4, Ammunition Afloat
- 8. OH 4-1, Combat Service Support Operations

DISTANCE LEARNING PRODUCT(S):

- 1. 045, The Logistics/Embarkation Specialist
- 2. 047, Introduction to Amphibious Embarkation

TASK: 0811.05.18 (CORE PLUS) SUPERVISE AMMUNITION MANAGEMENT ON THE GUN LINE

CONDITION(S): Given a cannon battery in firing position, an ammunition load, a mission, and the reference.

STANDARD(S): Ensuring the required ammunition to respond to all fire missions is present on each howitzer.

PERFORMANCE STEPS:

- 1. Receive information on the battery mission from the battery Fire Direction Officer.
- 2. Supervise the battery ammunition section in the timely delivery of all ammunition components.
- 3. Ensure excessive amounts of ammunition are not delivered.
- 4. Supervise the pickup of all ammunition trash (pallets, banding materials, grommets, lifting plugs, fuze cans, etc.)

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

- 1. MCTM 08198A-10, Operator’s Manual for Howitzer, Medium, Towed: 155mm, M198

TASK: 0811.05.19 (CORE PLUS) DIRECT SUSTAINMENT AND/OR SKILL PROGRESSION TRAINING FOR THE BATTERY

CONDITION(S): When assigned as the Battery Gunnery Sergeant, and given this order (MCO 3501.26A - Artillery Unit T&R Manual), appropriate equipment, administrative supplies, access to training records, battery personnel requiring training, available trainers, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Evaluate current state of individual and section training.
 - a. Receive input from Battery Commander.
 - b. Consult Battalion Field Artillery Chief for his evaluation of individual and section training deficiencies.
 - c. Compare individual and section performance against standards set in references and goals/objectives of the Battery Commander.
- 2. Develop short-term plan to correct serious deficiencies identified in STEP 1.
 - a. Identify actions to correct the skill deficiencies of assigned section chiefs.
 - b. Identify actions to correct skill and task performance deficiencies of howitzer sections.

3. Develop long-term plan to sustain performance and institute skill progression training in appropriate core plus skills.

a. Take appropriate action to correct training deficiencies of Section Chiefs and NCOs.

b. Supervise Section Chiefs and NCOs as they conduct sustainment, skill progression, and remedial performance training for their crew members.

4. Reevaluate training needs on a continuing basis.

a. Evaluate skill level of newly joined Marines.

b. Frequently update the Battery Commander on training status and implement any additional guidance.

INITIAL TRAINING SETTING: MOJT Sustainment: 1 Req By: GySgt

REFERENCE(S):

1. MCRP 3-0A, Unit Training Management Guide
2. MCRP 3-0B, How to Conduct Training

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0321, The M240G Machinegunner
3. 0335, Infantry Patrolling
4. 034, Landmine Warfare, Demolitions, and Breaching Operations
5. 0365, Anti-Armor Operations
6. 0368, The Heavy Machinegun Crewman
7. 0370, The Marine Rifleman: Combat Skills
8. 0372, The Marine Rifleman: Weapons
9. 0380, Infantry Squad Leader: Combat Leadership
10. 0381, Land Navigation
11. 0382, Infantry Squad Leader: Weapons and Fire Support
12. 0385, Land Navigation (Web)
13. 0410, MIMMS (AIS)
14. 0414, Ground Maintenance Management Procedures for Supervisors
15. 0416, The Marine Corps Publications and Directives System
16. 045, The Logistics/Embarkation Specialist
17. 047, Introduction to Amphibious Embarkation
18. 0813, Field Artillery Survey
19. 0816, Howitzer Section Chief
20. 0820, The M198 155mm Towed Howitzer
21. 0861, Basic Forward Observation Procedures
22. 1320, Fundamentals of Diesel Engines (Web)
23. 1330, Basic Shop Fundamentals for the Mechanic

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- 24. 1334, Diesel Engine Maintenance
- 25. 1335, Fundamentals of Diesel Engines
- 26. 2515, Antenna Construction and Propagation of Radio Waves
- 27. 2525, Communications Security
- 28. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
- 29. 2551, Field Wire Equipment and Procedures
- 30. 3503, Motor Transport NCO: Combat Operations
- 31. 3530, Incidental Motor Vehicle Operator
- 32. 3532, Incidental Motor Vehicle Operator (CD)
- 33. 3538, Dispatching Procedures for Motor Transport
- 34. 3580, Automotive Engine Maintenance and Repair
- 35. 571, NBC Individual Survival Measures
- 36. 5710, NBC Decontamination Team Procedures
- 37. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance
- 38. 7400, Warfighting Skills Distance Education Program

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook
- 3. Chemical Warfare
- 4. Forward Air Controller
- 5. Laying Methods & Hasty Survey Methods

TASK: 0811.05.20 (CORE PLUS) ASSIST IN TRAINING PLAN DEVELOPMENT AND IMPLEMENTATION

CONDITION(S): When assigned as the Battery Gunnery Sergeant, and given commander’s training guidance, the references, this order, and administrative supplies.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Analyze capabilities of the battery.
- 2. Analyze deficiencies of the battery in performing tasks described in the Artillery Unit T&R Manual.
- 3. Review the Battalion Annual Training Plan.
- 4. Advise the Battery Commander on the unit’s training status and advise / recommend on methods to high training readiness.

INITIAL TRAINING SETTING: MOJT Sustainment: 1 Req By: GySgt

REFERENCE(S):

- 1. MCRP 3-0A, Unit Training Management Guide
- 2. MCRP 3-0B, How to Conduct Training

TASK: 0811.05.21 (CORE PLUS) SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING

CONDITION(S): Given commander’s guidance, crew served weapons teams, appropriate equipment, references, and access to training area or range.

STANDARD(S): Per the references, ensuring proficiency equivalent to that of a Marine with MOS 0331.

PERFORMANCE STEPS:

- 1. Observe battery crew served weapons training.
- 2. Provide guidance to the Local Security Chief on crew served weapons training.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: GySgt

REFERENCE(S):

- 1. FM 23-27, MK 19 40mm Grenade Machinegun Mod 3
- 2. FM 23-65, Browning Machine Gun, Caliber .50, HB M2
- 3. MCWP 3-15.1, Machinegun and Machinegun Gunnery
- 4. TM 08670A-10/1A, Operator’s Manual, Machinegun, 7.62mm, M240
- 5. TM 08670B-10/1, Supplement 1, M240G

DISTANCE LEARNING PRODUCT(S):

- 1. 0321, The M240G Machinegunner
- 2. 0368, The Heavy Machinegun Crewman

ADMINISTRATIVE INSTRUCTIONS: NOTE: By training to a level of proficiency equivalent to that of a Marine of MOS 0331, the crew served weapon teams can train the rest of the Marines in the battery on the weapon system.

DUTY AREA 06 - M101A1 HOWITZER

TASK: 0811.06.01 (CORE PLUS) BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)

CONDITION(S): Given an M101A1 howitzer in a firing position, a DAP, SL-3 gear, string (crosshairs), and all adjustments completed on the range quadrant (both bubbles are centered exactly and the scales are on "0").

STANDARD(S): Per the reference, and to an accuracy of 0 mils within 3 minutes.

PERFORMANCE STEPS:

- 1. Attach crosshairs to muzzle.
- 2. Install boresighting disk or remove (M13) firing lock.
- 3. Level trunnions to 90-mil cant or less, using pretested gunner’s quadrant.
- 4. Sight through boresight disk or firing-pin hole, and align tube with crosshairs on the Distant Aiming Point (DAP).
- 5. Level "N" line, using bracket rotating knob.
- 6. Adjust "N" line on the Distant Aiming Point (DAP) by loosening clamping bolt and turning boresight screw.
- 7. Tighten clamping bolt.
- 8. Verify the sight picture adjustment.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.02 (CORE PLUS) BORESIGHTING THE DIRECT FIRE ELBOW TELESCOPE, USING A TESTING TARGET

CONDITION(S): Given an M101A1 howitzer in a firing position, a testing target with stand, SL-3 gear, string (crosshairs), and reference.

STANDARD(S): Per the reference, and to an accuracy of 0 mils within 2 minutes.

PERFORMANCE STEPS:

1. Level trunnions to 90-mil cant or less.
2. Cant the testing target to correspond with the cant of the trunnions.
3. Attach crosshairs to muzzle.
4. Install boresighting disk.
5. Align testing target on muzzle crosshairs, without moving the tube, by sighting through bore.
6. Look through elbow telescope.
7. Adjust "N" line on the right testing target diagram, if needed, by loosening clamping bolt and turning boresight screw.
8. Tighten clamping bolt.
9. Center cross level vial bubble using leveling worm knob.
10. Verify the sight picture adjustment.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.03 (CORE PLUS) LAY THE HOWITZER FOR QUADRANT, USING THE FIRE CONTROL QUADRANT

CONDITION(S): Given an M101A1 howitzer in a firing position, a fire command, a quadrant (elevation), and the reference.

STANDARD(S): Per the reference, announcing, "SET" within 30 seconds of the command (45 seconds for high angle missions), and to an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Announce, "QUADRANT (SO MUCH)."
2. Rotate elevating knob on the M4A1 fire control quadrant until announced quadrant setting appears on the elevation scale.
3. Level the cross level bubble.
4. Center the (elevation) bubble in the elevation vial by elevating or depressing the tube.
5. Repeat STEPS 3 and 4 until both bubbles are centered.
6. Verify both the cross level and elevation bubbles are (remain) centered and the announced quadrant appears on the elevation scale.

7. Announce, "SET."

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.04 (CORE PLUS) MEASURE THE QUADRANT, USING THE FIRE CONTROL QUADRANT

CONDITION(S): Given an M101A1 howitzer with the tube at an unknown quadrant, appropriate equipment, and reference.

STANDARD(S): Per the reference, announcing, "SET," within 15 seconds and measuring to an accuracy of 0 mils.

PERFORMANCE STEPS:

- 1. Turn elevation knob to center bubble.
- 2. Level the cross level bubble.
- 3. Announce the quadrant from the elevation counter.
- 4. Announce, "SET".

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.05 (CORE PLUS) SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE

CONDITION(S): Given an M101A1 howitzer in a firing position, a fire command, a target for direct fire, and the reference.

STANDARD(S): Per the reference, announcing, "SET," within 60 seconds of the initial fire command and within 30 seconds of subsequent fire commands, until the end of the mission.

PERFORMANCE STEPS:

- 1. Repeat the announced range.
- 2. Center the cross level bubble.
- 3. Set the appropriate range line on the center mass of the target, elevating or depressing the tube, as required.
- 4. Repeatedly announce, "SET", until the weapon is fired.
- 5. If subsequent commands are received, repeat STEPS 3 and 4.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.06 (CORE PLUS) DISASSEMBLE AND ASSEMBLE THE BREECHLOCK

CONDITION(S): Given an M101A1 howitzer, SL-3 gear, an assistant, and the reference.

STANDARD(S): Per the reference, reporting discrepancies and/or uncorrected deficiencies.

PERFORMANCE STEPS:

1. Check operation of the breech mechanism.
2. Disassemble the breechblock.
3. Assemble the breechblock.
4. Install the breech mechanism.
5. Perform function checks and equipment services.
6. Report discrepancies and/or uncorrected deficiencies to organizational maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.07 (CORE PLUS) DISASSEMBLE AND ASSEMBLE THE FIRING LOCK

CONDITION(S): Given an M101A1 howitzer, SL-3 gear, and the technical manual.

STANDARD(S): Per the reference, reporting any discrepancies and/or uncorrected deficiencies.

PERFORMANCE STEPS:

1. Remove the (M13) firing lock.
2. Disassemble the (M13) firing lock.
3. Assemble the (M13) firing lock.
4. Install the (M13) firing lock.
5. Perform function checks and equipment services.
6. Report discrepancies and/or uncorrected deficiencies to organizational maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.08 (CORE PLUS) LOAD AND FIRE A PREPARED ROUND

CONDITION(S): Given an M101A1 howitzer in a firing position, a prepared round, a command to fire, an assistant (gunner), and the reference.

STANDARD(S): Per the reference, using proper commands.

PERFORMANCE STEPS:

1. WARNING: Before loading the howitzer for actual fire, ensure all personnel are prepared for a misfire.
2. (Assistant Gunner) Depress and pull breechblock operating handle to the rear until it stops.
3. (Number 1 person) Ensure the bore is clear.
4. (Number 1 person) Load the projectile using your fist to insert it.

WARNING: Avoid striking fuze or primer when handling a live round.

NOTE: If the round does not seat flush, seat it with rammer extractor tool by pushing on end of handle.

- 5. (Assistant Gunner) Close breech.
- 6. (Assistant gunner) Fire on command.
- 7. (Assistant gunner) Open breech to eject expended canister.
- 8. (Number 1 person) Rotate breech operating handle to rear.
- 9. (Number 1 person) Remove expended canister. Pull expended canister straight out from the breech.
- 10. (Number 1 person) Inspect bore and chamber.
- 11. (Number 1 person) Announce, "BORE CLEAR", if clear.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
C445	CTG 105MM, HE, M1 W/O FUZE	1.000 EA	0.000 EA	0.000 EA
C449	105MM M314A3 ILLUMINATION	1.000 EA	0.000 EA	0.000 EA
C452	105MM M84 HC, SMOKE, BE	1.000 EA	0.000 EA	0.000 EA
C462	105MM M444 ICM, HE	1.000 EA	0.000 EA	0.000 EA
C463	105MM M548 RAP, HE	1.000 EA	0.000 EA	0.000 EA
C477	CTG 105MM, SMOKE, WP, M60A2	1.000 EA	0.000 EA	0.000 EA
C479	CTG 105MM, SCR HC SMK W/O FZ	1.000 EA	0.000 EA	0.000 EA
N248	FUZE M565 MT	1.000 EA	0.000 EA	0.000 EA
N285	FUZE M577 MT	1.000 EA	0.000 EA	0.000 EA
N340	FUZE, PD, M739	1.000 EA	0.000 EA	0.000 EA

TASK: 0811.06.09 (CORE PLUS) PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE M101A1 HOWITZER

CONDITION(S): Given an M101A1 howitzer requiring operational checks and services, an interval of maintenance, SL-3 gear, clean rags, one assistant, pen, maintenance form, appropriate lubricants with gun, and the reference.

STANDARD(S): Per the reference, obeying all safety precautions and warnings, and reporting all defects/discrepancies.

PERFORMANCE STEPS:

- 1. Perform equipment checks and services using Preventive Maintenance Checks and Services (PMCS) Table, Chapter 2 (TM 9-1015-203-12).
- 2. Perform maintenance inspections per Chapter 3 (TM 9-1015-203-12).
- 3. Perform troubleshooting procedures per Chapter 3 (TM 9-1015-203-12).
- 4. Report status of equipment and/or deficiencies.
- 5. Observe precautions and warnings.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0416, The Marine Corps Publications and Directives System

ADMINISTRATIVE INSTRUCTIONS: NOTE: Inspections must occur at regular intervals to avoid equipment damage and/or failure. (before/during/after operations, and weekly/monthly checks)

TASK: 0811.06.10 (CORE PLUS) VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

CONDITION(S): Given an M101A1 howitzer after operational checks and services have been performed, SL-3 gear, pen, the completed/annotated maintenance form, and the reference.

STANDARD(S): Per the reference, ensuring all operator level maintenance is performed and all defects are corrected or reported.

PERFORMANCE STEPS:

- 1. Verify performance of equipment checks and services, using Preventive Maintenance Checks and Services (PMCS) Table, Chapter 2, TM 9-1015-203-12.
- 2. Determine serviceability of equipment.
- 3. Verify performance of maintenance and/or inspections, per Chapter 3, TM 9-1015-203-12.
- 4. Verify proper troubleshooting procedures are performed and followed, per Table 3-1, Chapter 3, TM 9-1015-203-12.
- 5. Verify status of equipment, and document deficiencies.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System

TASK: 0811.06.11 (CORE PLUS) PERFORM PREFIRE CHECKS

CONDITION(S): Given an M101A1 howitzer in a firing position, respirator wrench, and the reference.

STANDARD(S): Per the reference, reporting all discrepancies and/or uncorrected deficiencies to the section chief.

PERFORMANCE STEPS:

- 1. Check bore for obstructions.
- 2. Check firing pin for serviceability.
- 3. Check respirator for proper setting.
- 4. Ensure the oil index is flush.
- 5. Check the piston rod outer nut.
- 6. Ensure trails are fully spread and trail locking pins are installed.

- 7. Check for smooth operation of breech mechanism.
- 8. Ensure axle locks are in unlocked position (inboard) and handbrakes are engaged.
- 9. Check fire control instruments for obvious defects and smooth operation and ensure the weapon has been boresighted.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.12 (CORE PLUS) PERFORM FIRE CONTROL ALIGNMENT TESTS

CONDITION(S): Given an M101A1 howitzer, SL-3 gear, a section crew, a level surface, a plumb line with the plumb line weight suspended in an-oil filled container, a testing target with a stand, two 2-1/2-ton jacks, a gunner's quadrant, strings (crosshairs), breech boresight disk, and the reference.

STANDARD(S): Per the reference, ensuring the on-carriage fire control and gunner's quadrant are correctly adjusted and all discrepancies are reported.

PERFORMANCE STEPS:

- 1. Prepare equipment for tests.
- 2. Test gunner's quadrant. (See Task 0811.02.02, TEST THE GUNNER'S QUADRANT.)
- 3. Conduct tests of on-carriage fire control equipment.
- 4. Report discrepancies and/or uncorrected deficiencies to OM.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.13 (CORE PLUS) VERIFY FIRE CONTROL ALIGNMENT TESTS

CONDITION(S): Given an M101A1 howitzer, SL-3 gear, a section crew, level surface, plumb line with the plumb-line weight suspended in an oil filled container, a testing target with stand, two 2.5 ton jacks, a gunner's quadrant, and the reference.

STANDARD(S): Per the reference, ensuring all fire control alignment tests are complete and on-carriage fire control and gunner's quadrants are in adjustment or are reported.

PERFORMANCE STEPS:

- 1. Ensure trunnions are/remain level.
- 2. Verify tests of the gunner's quadrant.
- 3. Verify the five tests of the on-carriage fire control equipment.
- 4. Verify report of any discrepancies and uncorrected deficiencies to OM.
- 5. Review annotated, completed maintenance form.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.14 (CORE PLUS) TAKE IMMEDIATE ACTION FOR MISFIRE

CONDITION(S): Given an M101A1 howitzer, a misfire situation, and the reference.

STANDARD(S): Per the reference, observing all safety precautions, and completing misfire procedures for a hot tube within 5 minutes from the time the weapon is loaded and firing or unloading chambered rounds within 5 minutes for a cold tube.

PERFORMANCE STEPS:

- 1. Determine tube conditions.
- 2. Take appropriate action.
 - a. Take immediate action for a cold tube.
 - b. Take immediate action for a hot tube.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S): (NONE)

TASK: 0811.06.15 (CORE PLUS) ADJUST THE EQUILIBRATOR

CONDITION(S): Given an M101A1 howitzer with an equilibrator that needs adjusting, section tools, and the reference.

STANDARD(S): Per the reference, ensuring the tube can be elevated or depressed with equal ease.

PERFORMANCE STEPS:

- 1. Inspect the operation of the elevating handwheel through the entire range, checking for smoothness of operation.
- 2. Make adjustments as required.
- 3. Ensure crew member never removes the adjusting nuts at unit level maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1
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TASK: 0811.06.16 (CORE PLUS) TROUBLESHOOT COMMON MALFUNCTIONS OF THE HOWITZER

CONDITION(S): Given an M101A1 howitzer with section equipment, personnel, a simulated/actual malfunction, and the reference.

STANDARD(S): Per the reference, correcting the malfunction.

PERFORMANCE STEPS:

- 1. Perform troubleshooting procedures on the cannon.
- 2. Perform troubleshooting procedures on the recoil mechanism.
- 3. Perform troubleshooting procedures on the carriage.
- 4. Perform troubleshooting procedures on the fire control equipment.
- 5. Perform troubleshooting procedures on the taillight assembly.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.17 (CORE PLUS) PREPARE THE HOWITZER AND AMMUNITION FOR EXTERNAL LOAD

CONDITION(S): Given the requirement to externally lift an M101A1 howitzer, the required time, the references, an assistant, and the following equipment: M101A1 howitzer, ammunition, chain leg cargo sling (15,000 pound capacity), nylon cord (type III), 2-inch tape measure, padding, two nylon CGU-1B cargo straps (5,000 pound capacity), and additional web ring.

STANDARD(S): Per the references, correctly rigging the howitzer and ammunition within 15 minutes.

PERFORMANCE STEPS:

1. Prepare the howitzer using the Single Point Procedure.
2. Prepare the howitzer using the Dual Point Procedure.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: Cpl

REFERENCE(S):

1. FMFRP 5-31, Helicopter External Air Transport Procedures
2. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.18 (CORE PLUS) ESTABLISH A STANDARD ANGLE

CONDITION(S): Given an M101A1 howitzer that has been boresighted with a test target, a pre-tested gunner’s quadrant, section equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Establish the standard angle.
2. Use standard angle to verify boresight.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.19 (CORE PLUS) VERIFY BORESIGHT, USING THE STANDARD ANGLE METHOD

CONDITION(S): Given a scenario involving the nonavailability of a Distant Aiming Point (DAP) or test target and an M101A1 howitzer that has recently occupied a new position but not been fired, the reference, and section equipment.

STANDARD(S): Per the reference and to an accuracy of 0 mils within 3 minutes.

PERFORMANCE STEPS:

1. Ensure tube is in battery by checking alignment of recoil scribe line.
2. Fasten a pin or nail to the left witness mark.
3. Ensure cant is less than 90 mils.
4. Set the predetermined elevation on the pretested M1A1 gunner’s quadrant.

- 5. Level the gunner’s quadrant bubble by elevating the tube.
- 6. Align all scribe lines.
- 7. Place parallax shield in eyepiece.
- 8. Set off predetermined deflection and look through the eyepiece.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.20 (CORE PLUS) EMPLOY DEFLECTION BOARD IN ASSAULT FIRE PROCEDURES

CONDITION(S): Given a deflection board, howitzer with section equipment and personnel, an order to conduct assault fire, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Direct fire on the target until rounds fall close.
- 2. (Assistant) Attach deflection board to an aiming post.
- 3. (Assistant) Emplace aiming post with deflection board attached exactly 50 meters from the howitzer.
- 4. Switch pantel to deflection board to fine tune to target.
- 5. Adjust deflections to nearest mil until a 1-mil deflection bracket is obtained.
- 6. Adjust subsequent deflections to the nearest 0.25 mil.
- 7. (Assistant Gunner) Adjust elevation to the nearest 0.1 mil.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
C445	CTG 105MM, HE, M1 W/O FUZE	4.000 EA	0.000 EA	0.000 EA
N659	FUZE CP MK399-1	4.000 EA	0.000 EA	0.000 EA

ADMINISTRATIVE INSTRUCTIONS: The deflection board is only required with howitzers using the M12-series sights.

TASK: 0811.06.21 (CORE PLUS) LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP) (AIMING POINT-DEFLECTION METHOD)

CONDITION(S): Given a prepared M101A1 howitzer in a firing position with the tube within 50 mils of the azimuth of fire (no shift in trails is necessary), a command to lay the weapon, a Distant Aiming Point (DAP), one assistant, a grease pencil, a gunner’s reference card, and the references.

STANDARD(S): Per the references, using proper commands, and ensuring an accuracy of 0 mils within 2 minutes.

PERFORMANCE STEPS:

- 1. Prepare the howitzer for laying in the same manner as TASK 0811.09.22, LAY A HOWITZER FOR INITIAL DIRECTION OF FIRE, USING M12-SERIES SIGHT.

2. Place announced deflection on the azimuth slipping scale.
3. Ensure bubbles are leveled.
4. Traverse the tube until Distant Aiming Point (DAP) is centered in the reticle pattern.
5. Ensure bubbles are centered.
6. Announce, "NUMBER (SO AND SO), AIMING POINT IDENTIFIED, DEFLECTION (SO MUCH)."
7. Record lay deflection on gunner's reference card.
8. Move the slipping and micrometer scales to 2800.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

PERFORMANCE SUPPORT TOOL(S):

1. Laying Methods & Hasty Survey Methods

TASK: 0811.06.22 (CORE PLUS) LAY A HOWITZER FOR INITIAL DIRECTION OF FIRE, USING M12-SERIES SIGHT

CONDITION(S): Given a howitzer in a firing position, a howitzer section, a command to lay the weapon, an aiming circle, an aiming circle operator, an assistant, a grease pencil, a gunner's reference card, and the references.

STANDARD(S): Per the references, using proper commands, and ensuring an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Sight in on the aiming point upon receiving the command, "NUMBER (SO AND SO) ADJUST, AIMING POINT THIS INSTRUMENT."
2. Announce, "NUMBER (SO AND SO), AIMING POINT IDENTIFIED", when pantel crosslines align on aiming circle, and longitudinal and cross level bubbles center.
3. Receive command from aiming point, "NUMBER (SO AND SO), DEFLECTION (SO MUCH)."
4. Announce, "NUMBER (SO AND SO), DEFLECTION (SO MUCH) (SO MANY) MILS."
5. Turn azimuth micrometer knob until announced deflection appears on azimuth and micrometer scales.
6. Shift howitzer until pantel crosshairs center on the aiming point.

NOTE: Ensure longitudinal and cross level bubbles center.
7. Adjust the sight picture, if necessary, using the traversing handwheel.
8. Announce, "NUMBER (SO AND SO), READY FOR RECHECK."
9. Receive command from aiming point, "NUMBER (SO AND SO), DEFLECTION (SO MUCH)."
10. Announce, "NUMBER (SO AND SO), DEFLECTION (SO MUCH) (SO MANY) MILS."
11. Turn azimuth micrometer knob until announced deflection appears on azimuth and micrometer scales.

NOTE: If deflection is 10 mils or less, adjust with handwheel. If deflection is over 10 mils, shift trails.

Annex III to
Appendix F to
ENCLOSURE (3)

12. Shift howitzer until pantel crosshairs center on the aiming point.

NOTE: Ensure longitudinal bubble and cross level bubble are centered.

13. Repeat STEPS 8 through 12 until the difference between the aiming point reading on the pantel and the reading on the nonslipping azimuth scale is 0 mils.

14. Gunner will announce, "NUMBER (SO AND SO), DEFLECTION (SO MUCH) 0 MILS", and give the hand and arm signal for 0 mils.

15. (Instrument Operator) Announce, "NUMBER (SO AND SO) IS LAID."

16. Record deflection to aiming circle on gunner's reference card.

NOTE: The cannon tube is now oriented for direction and must not be traversed until an aiming point is established.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods
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TASK: 0811.06.23 (CORE PLUS) LAY A HOWITZER BY RECIPROCAL LAY, USING M12-SERIES SIGHT

CONDITION(S): Given two howitzers in firing positions (one laid on the azimuth of fire and the other positioned within 50 mils of the azimuth of fire), a command to lay a weapon, and the reference.

STANDARD(S): Per the reference, using proper commands, ensuring the adjacent howitzer (Howitzer #2) is laid within 90 seconds and to an accuracy of 0 mils.

PERFORMANCE STEPS:

- 1. Sight in on Howitzer #2's pantel.
- 2. Announce, "NUMBER 2 ADJUST, AIMING POINT THIS INSTRUMENT."
- 3. (Gunner on Howitzer #2) Announce, "NUMBER 2, AIMING POINT IDENTIFIED."
- 4. Announce the reading, "NUMBER 2 DEFLECTION (SO MUCH)."
- 5. (Gunner on Howitzer #2) Announce, "NUMBER 2, DEFLECTION (SO MUCH) (SO MANY) MILS."

NOTE: Gunners on Howitzers #1 and #2 must repeat steps 4 and 5 until the difference between readings is 0 mils.

- 6. (Gunner on Howitzer #2) Announce, "NUMBER 2, DEFLECTION 0 MILS."

NOTE: At this announcement, gunner for Howitzer #2 will give hand and arm signal for 0 mils.

- 7. Announce, "NUMBER 2 IS LAID."

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

TASK: 0811.06.24 (CORE PLUS) ALIGN COLLIMATOR, USING M12-SERIES SIGHT

CONDITION(S): Given a howitzer laid on the azimuth of fire, a collimator, an assistant, a grease pencil, a gunner’s reference card, and the reference.

STANDARD(S): Per the reference, ensuring the vertical hairline on the pantel splits the collimator lens.

PERFORMANCE STEPS:

- 1. Center cross level and longitudinal bubbles.
- 2. Set the common deflection (2800 mils on M101A1) on the nonslipping scale.

NOTE: If terrain is not suitable at this deflection, but suitable at another even-hundred deflection, select the even-hundred deflection that is closest to common deflection. If collimator must be emplaced between even hundred, select the deflection closest to common deflection.

- 3. (Assistant) Emplace collimator (See Task 0811.01.04, EMLACE AND RECOVER THE COLLIMATOR).
- 4. Align collimator with M-12 series sight.
- 5. Announce, "SET."
- 6. Record deflection to collimator on gunner’s reference card.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.25 (CORE PLUS) ALIGN AIMING POSTS, USING THE M12-SERIES SIGHT

CONDITION(S): Given a howitzer laid on the azimuth of fire, a complete set of aiming posts, an assistant, a grease pencil, a gunner’s reference card, and the reference.

STANDARD(S): Per the reference, ensuring no displacement in the reticle pattern.

PERFORMANCE STEPS:

- 1. Center cross level and longitudinal bubbles.
- 2. Set the common deflection (2800 mils on M101A1) on the nonslipping scale.

NOTE: If nature of terrain prevents aiming posts from being set out at the common deflection, set aiming posts on an even hundred mil graduation on the nonslipping scale.

- 3. Align aiming posts by directing assistant with standard hand and arm signals.
- 4. Verify correct sight picture.
- 5. Record deflection to aiming posts on gunner’s reference card.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.26 (CORE PLUS) BORESIGHT THE M12-SERIES PANORAMIC TELESCOPE, USING A DISTANT AIMING POINT (DAP)

CONDITION(S): Given an M101A1 howitzer in a firing position, SL-3 gear, boresighting disk, string (crosshairs), a DAP at least 1500 meters from howitzer, and the reference.

STANDARD(S): Per the reference, within 3 minutes and ensuring an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Attach crosshairs to the muzzle at the witness marks.
2. Insert boresighting disk.
3. Level trunnions within 90 mils.
4. Place a pretested gunner’s quadrant on breech ring leveling plates, and elevate or depress cannon tube using elevating handwheel until bubble in gunner’s quadrant centers.
5. Center longitudinal bubble using longitudinal leveling knob.
6. Align cross level scribe lines using cross leveling knob.
7. Align coarse longitudinal index on sight mount.
8. Align fine longitudinal index on sight mount.
9. Center bubbles.
10. Zero elevation scale and elevation micrometer on M4A1 range quadrant.
11. Align pantel course and fine elevation indexes.
12. Zero gunner’s aid scale, azimuth micrometer index, slipping azimuth scale, and nonslipping azimuth scale on the panoramic telescope.
13. Align muzzle crosslines on Distant Aiming Point (DAP).
14. Verify intersection by looking through eye piece.
15. Adjust horizontal and vertical reticle line, if necessary.
16. Verify sight picture.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. TM 9-1015-203-12, Operator’s and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.27 (CORE PLUS) BORESIGHT THE M12-SERIES PANORAMIC TELESCOPE, USING A TESTING TARGET

CONDITION(S): Given a M101A1 howitzer in a firing position, SL-3 gear, string, a testing target with stand, a pretested gunner’s quadrant, assistants, and the reference.

STANDARD(S): Per the reference, ensuring an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Attach crosshairs to the muzzle at the witness marks.
2. Insert boresighting disk, if available.
3. Level trunnions within 90 mils, using a pretested gunner’s quadrant.
4. Level tube to 0 mils, using gunner’s quadrant, and apply correction.

NOTE: Set gunner's quadrant to read the value as indicated on embedded correction.

5. Center longitudinal bubble, using longitudinal leveling knob.
6. Align cross level scribe lines, using cross leveling knob.
7. Align coarse longitudinal index, if necessary.
8. Align fine longitudinal index, if necessary.
9. Align pantel coarse and fine elevation indexes.
10. Zero gunner's aid scale, slipping micrometer scale, slipping azimuth scale, and nonslipping azimuth scale.
11. Direct assistants to place the test target 50 meters in front of howitzer.
12. Direct assistants to move the testing target so the center testing target diagram aligns with vertical and horizontal muzzle crosslines.
13. Look through eyepiece to check the vertical alignment of testing target diagram. Adjust, if necessary.
14. Adjust coarse and fine elevation indexes, if not aligned.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.28 (CORE PLUS) LAY A HOWITZER FOR DEFLECTION, USING M12-SERIES SIGHT

CONDITION(S): Given an emplaced M101A1 howitzer laid on the azimuth of fire, an aiming point (collimator, aiming posts, or distant aiming point) emplaced, a fire command, and the reference.

STANDARD(S): Per the reference, using proper commands, within 15 seconds, and ensuring an accuracy of 0 mils.

PERFORMANCE STEPS:

1. Lay the howitzer for deflection, using M1A1 collimator as an aiming point.
2. Lay the howitzer for deflection, using M1A2 aiming posts as an aiming point.
3. Lay howitzer for deflection using a Distant Aiming Point (DAP).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 9-1015-203-12, Operator's and Organizational Maintenance Manual for Howitzer, Light, Towed: 105-mm, M101A1

TASK: 0811.06.29 (CORE PLUS) SUPERVISE DIRECT FIRE WITH THE M101A1 HOWITZER

CONDITION(S): Given a howitzer in a firing position, a target, a fire command, in a daylight and darkness environment, and the references.

STANDARD(S): Per the references, laying and firing on the target within 2 minutes (daylight) and 3 minutes (darkness) after the initial fire command.

PERFORMANCE STEPS:

1. Announce fire commands.

- 2. Ensure that the cross level bubbles are centered.
- 3. Wait for the gunner to announce "SET" after he traverses and elevates the tube while sighting in on the target.
- 4. Announce subsequent fire commands until EOM.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. Defense Intelligence Agency (DIA) Projectile Fragmentation Identification Guide
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
C445	CTG 105MM, HE, M1 W/O FUZE C448 Cartridge, 105mm: HEP, HEP-T, M327 may be used in lieu of C445, HE. HE and HEP rounds to be used against "hard targets" during the conduct of direct fire, i.e. APCs, Bunkers, etc.	4.000 EA	4.000 EA	24.000 EA
C513	105MM M546 APERS-T (BEEHIVE) APERS to be used against soft-skinned targets during direct fire, i.e. Personnel, Trucks, etc.	4.000 EA	4.000 EA	24.000 EA
N278	FUZE M563 MTSQ To be used with the APERS round only.	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739 N340, PD Fuze will be required for the C445 HE projectile to make a complete round of artillery ammunition. However, the N340 PD fuze will not be required when using the HEP / HEP-T projectile. The HEP / HEP-T projectile is already fused and packaged as a complete round of artillery ammunition.	4.000 EA	4.000 EA	24.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0816, Howitzer Section Chief

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ENCLOSURE (3)

MOS 0840, NAVAL SURFACE FIRE SUPPORT PLANNER

DUTY AREA 01 - NAVAL GUNFIRE PLANNING OPERATIONS

TASK: 0840.01.02 (CORE) BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE GENERAL MISSION AND CHARACTERISTICS OF NAVAL GUNFIRE (NGF) EMPLOYED IN AN AMPHIBIOUS OPERATION

CONDITION(S): Given a mission to provide Naval Gunfire (NGF) support, an operation order, the commander's guidance, an intelligence summary, a map, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. State the mission of Naval Gunfire (NGF) in the amphibious operation.
2. State the three groups of targets for Naval Gunfire (NGF).
3. State the three subgroups of an amphibious task force and their missions.
4. State the three main phases of the amphibious operation and the principle tasks during those phases.
5. Explain the capabilities of Naval Gunfire (NGF).
6. State the six classes of naval gunfire and their effects on the target.
7. State the eleven tactical uses of Naval Gunfire (NGF).
8. State the three categories of Naval Gunfire (NGF) referencing prearrangement.
9. State the four types of Naval Gunfire (NGF).
10. State the two techniques of Naval Gunfire (NGF).

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Capt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
3. MCWP 3-42.1, Fire Support in MAGTF Operations
4. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program
2. 8500, Amphibious Warfare Distance Education Program (Phase I)
3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.01.03 (CORE) BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE CONSIDERATIONS OF EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT FOR AN AMPHIBIOUS OPERATION

CONDITION(S): Given a mission to provide Naval Gunfire (NGF) support, an operations order, commander's guidance, an intelligence summary, a map, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. State the seven types of Naval Gunfire (NGF) support ships and the ship "classes" to which they correspond.

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2. State the type of Naval Gunfire (NGF) support ship commonly used in direct support.
3. State the type of Naval Gunfire (NGF) support ship commonly used in general support.
4. State Naval Gunfire (NGF) assets available, including weapons systems, munitions, rates of fire, and maximum ranges.
5. State the considerations which will determine the employment of Naval Gunfire (NGF) during advance force operations, based on the tasks assigned to the advance task force.
6. Upon the decision to employ an advance force, state the three planning considerations confronting the commanders.
7. State the five types of Naval Gunfire (NGF) employed during the assault phase and the establishment of a beachhead phase of the operation.
8. State the tasks of Naval Gunfire (NGF) during landing (D-day).
9. State the mission of Naval Gunfire (NGF) after landing.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Capt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
3. MCWP 3-42.1, Fire Support in MAGTF Operations
4. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program
2. 8500, Amphibious Warfare Distance Education Program (Phase I)
3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.01.04 (CORE) BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE ORGANIZATION FOR COMMAND, CONTROL AND EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT PLANNING FOR AN AMPHIBIOUS OPERATION

CONDITION(S): Given a mission to provide Naval Gunfire (NGF) support, the commander's guidance, an intelligence summary, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Describe the organization of the naval elements concerned with Naval Gunfire (NGF).
2. Explain the task of the amphibious task force gunnery officer.
3. Explain how control of Naval Gunfire (NGF) will be exercised during the operation.
4. Explain the organization of the advance task force commander's staff.
5. Explain the command element which exercises control of Naval Gunfire (NGF) in the advance task force.
6. Explain how Naval Gunfire (NGF) will be coordinated during the ship to shore movement.

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ENCLOSURE (3)

7. Define command responsibility during the employment of Naval Gunfire (NGF) during the phases of an amphibious operation.
8. Describe how the overall coordination of Naval Gunfire (NGF) will be transferred to the Fire Support Coordination Center (FSCC) when ashore.
9. Given the mission, explain how the following elements will be task organized:
 - a. Naval Gunfire (NGF) section, landing force headquarters.
 - b. NGF section, ground combat element of the Marine Air Ground Task Force (MAGTF).
 - c. Naval Gunfire (NGF) section, Marine Division.
 - d. Naval Gunfire (NGF) liaison team, maneuver regiment.
 - e. Shore Fire Control Party (SFCP).
 - f. Radar Beacon Teams.
10. Explain the duties of the NGLO officer.
11. Explain the duties of the Naval Gunfire (NGF) Spotter.
12. Explain the duties of Naval Gunfire (NGF) officer, artillery regiment.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Capt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
3. MCWP 3-42.1, Fire Support in MAGTF Operations
4. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program
2. 8500, Amphibious Warfare Distance Education Program (Phase I)
3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.01.05 (CORE) PREPARE AND BRIEF A NAVAL GUNFIRE (NGF) ESTIMATE OF SUPPORTABILITY

CONDITION(S): Given a tactical situation, access to the appropriate references and sources of information, and equipment.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Analyze the comparative capabilities of Naval Gunfire (NGF) to support each contemplated Course Of Action (COA).
2. Consider the following factors when considering each Course of Action (COA):
 - a. Hydrography.
 - b. Terrain.
 - c. Weather.
 - d. Means required.

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- e. Training.
 - f. Intelligence.
 - g. Helicopter support requirements.
 - h. Electronic warfare.
 - i. Miscellaneous.
- 3. Prepare the estimate.
 - 4. Brief the estimate.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 2. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

- 1. 7400, Warfighting Skills Distance Education Program
 - 2. 8500, Amphibious Warfare Distance Education Program (Phase I)
 - 3. 8600, Amphibious Warfare Distance Education Program (Phase II)
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TASK: 0840.01.06 (CORE) PREPARE AND BRIEF AN OVERALL NAVAL GUNFIRE (NGF) SUPPORT REQUIREMENTS LETTER

CONDITION(S): Given a tactical situation, the references, and appropriate administrative supplies.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Prepare the letter, ensuring it includes:
 - a. Targets to be engaged during all three periods (pre-D-day/pre-H-hour, D-day, and post-D-day).
 - b. Estimated duration of fires for all three periods.
 - c. Estimated number and type of ships required for all three periods.
 - d. Estimated amount and type of ammunition for all three periods.
 - e. Estimated number of radio frequencies (primary and alternate) required for Shore Fire Control Parties (SFCPs).
- 2. Ensure Commander of the Landing Force (CLF) approves the letter.
- 3. Transmit the letter to the Commander of the Amphibious Task Force (CATF) for approval.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 2. MCWP 3-42.1, Fire Support in MAGTF Operations
- 3. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

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DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program
 2. 8500, Amphibious Warfare Distance Education Program (Phase I)
 3. 8600, Amphibious Warfare Distance Education Program (Phase II)
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TASK: 0840.01.07 (CORE) PREPARE AND BRIEF A DETAILED NAVAL GUNFIRE (NGF) SUPPORT REQUIREMENTS LETTER

CONDITION(S): Given a tactical situation, the references, and appropriate administrative supplies.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Prepare the letter.
 - a. Consider ships available.
 - b. Determine if Pre-D-day fires will be used.
 - c. Consider the needs of subordinate echelons.
 - d. Consider the scheme of maneuver.
 - e. Analyze the latest intelligence.
 - f. Determine target classifications.
 - g. Determine target priorities.
2. Ensure the letter includes:
 - a. Pre-D-day details.
 - (1) Targets to be destroyed or damaged.
 - (2) Other fire missions.
 - (3) Ammunition by amount and type.
 - (4) Number of ships and aircraft.
 - (5) Zones of fire.
 - b. D-Day details.
 - (1) Targets for destruction.
 - (2) Landing beach preparation and prearranged close and deep supporting fires.
 - (3) Ammunition by amount and type.
 - (4) Recommended priority of attack of targets in designated zones of fire.
 - (5) Assignment by type of direct and general support ships.
 - (6) Assignment of spotting aircraft (aircraft to be provided by naval elements or the landing force).
 - (7) Communications requirements.
 - (8) Zones of fire.
 - c. Post-D-day details.

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- (1) Anticipated daily requirements for spotting aircraft.
- (2) Approximate daily ammunition requirements.
- (3) Radio frequencies required.
- (4) Estimated duration of need for gunfire support.

- 3. Ensure Commander of the Landing Force (CLF) approves the letter.
- 4. Transmit the letter to the Commander of the Amphibious Task Force (CATF) for approval.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 2. MCWP 3-42.1, Fire Support in MAGTF Operations
- 3. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

- 1. 7400, Warfighting Skills Distance Education Program
- 2. 8500, Amphibious Warfare Distance Education Program (Phase I)
- 3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.01.08 (CORE) BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND COMMANDER LANDING FORCE (CLF) ON NAVAL GUNFIRE (NGF) AND GENERAL FIRE SUPPORT COORDINATION TECHNIQUES TO BE EMPLOYED DURING THE ASHORE PHASE OF THE OPERATION

CONDITION(S): Given a mission to provide supporting arms coordination during an amphibious operation, an operation order, commander’s guidance, intelligence summary, the scheme of maneuver, a map, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. State the considerations in developing coordinating techniques for the amphibious operation.
- 2. State and distinguish between the three principle measures to effect fire support coordination.
- 3. Describe and explain the employment of Fire Support Coordination Measures (FSCMs).
- 4. State the method of fire support coordination when weapons or targets effect adjacent areas of operation.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 2. MCWP 3-42.1, Fire Support in MAGTF Operations
- 3. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

- 1. 7400, Warfighting Skills Distance Education Program
- 2. 8500, Amphibious Warfare Distance Education Program (Phase I)

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ENCLOSURE (3)

3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.01.09 (CORE) WRITE A NAVAL GUNFIRE (NGF) SUPPORT PLAN TAB TO AN OPERATIONS PLAN/ORDER

CONDITION(S): Given a mission to provide Naval Gunfire (NGF), concept of operations, commander's guidance, an intelligence summary, a map, and the appropriate references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Write a Naval Gunfire (NGF) plan, per the Joint Operation Planning System (JOPS).
2. State the important considerations pertaining to advanced force operations when writing the Naval Gunfire (NGF) plan.
3. Write the task organization to the Naval Gunfire (NGF) plan. State the six elements of information pertaining to task organization.
4. Write a five paragraph order to the Naval Gunfire (NGF) plan to the operations plan/order to include the following:
 - a. Situation.
 - b. Mission.
 - c. Execution.
 - d. Administration and Logistics.
 - e. Communications.
5. Supervise the drafting of the following enclosures and utilize the proper format of the following:
 - a. Naval Gunfire Operations Overlay.
 - b. D-Day Schedule of Fires.
 - c. Naval Gunfire Reports.
 - d. Radar Beacon Plan.
6. State the reason for an alternate plan.
7. Distinguish between the Naval Gunfire (NGF) plan and the landing force Naval Gunfire (NGF) plan.
8. Explain the approval process and the distribution process for the Naval Gunfire (NGF) plan.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
2. MCWP 3-42.1, Fire Support in MAGTF Operations
3. MCWP 5-1, Command and Staff Action
4. NWP 22-1, The Amphibious Task Force Plan
5. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program

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ENCLOSURE (3)

- 2. 8500, Amphibious Warfare Distance Education Program (Phase I)
- 3. 8600, Amphibious Warfare Distance Education Program (Phase II)

DUTY AREA 02 - FIRE SUPPORT COORDINATION CENTER (FSCC) OPERATIONS

TASK: 0840.02.01 (CORE) INFORM SUPPORTED MANEUVER COMMANDER OF THE NAVAL GUNFIRE (NGF) TACTICAL MISSIONS AND CORRESPONDING PLAN TO SUPPORT THE SCHEME OF MANEUVER

CONDITION(S): Given the maneuver commander’s guidance and/or the Operation’s Order (OPORD), a fire support plan/matrix, the situation map, a target list, plotting equipment, communications with higher and lower Fire Support Coordination Center (FSCCs), the direct and general support ships, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Monitor the Naval Gunfire (NGF) support plan.
- 2. Brief the supported unit on the Naval Gunfire (NGF) tactical mission.
- 3. Brief the supported unit on the Naval Gunfire (NGF) support plan.
- 4. Brief target acquisition means to the commander.
- 5. Inform the supported unit of any changes or deviations resulting from combat development or the tactical situation.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 6-20-30, Fire Support For Corps and Division
- 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

DISTANCE LEARNING PRODUCT(S):

- 1. 7400, Warfighting Skills Distance Education Program
- 2. 8500, Amphibious Warfare Distance Education Program (Phase I)
- 3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.02.02 (CORE PLUS) BRIEF A MANEUVER COMMANDER ON THE FIRE SUPPORT PLAN

CONDITION(S): Given an offensive or defensive tactical situation, an Operation’s Order (OPORD), commander’s guidance, a requirement to brief the maneuver commander on the fire support plan, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Explain the offensive/defensive fire support considerations.
- 2. Describe how the offensive/defensive fire support plan supports the operation.
- 3. Explain offensive/defensive considerations for special situations (MOUT, desert mountains, counter-insurgency, etc.).
- 4. Explain fire support considerations for special situations.
- 5. Explain a Quick Fire Plan.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FMFM 2-7-1, Fire Support Coordination by the MAGTF CE
4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
5. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program
2. 8500, Amphibious Warfare Distance Education Program (Phase I)
3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.02.03 (CORE) ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)

CONDITION(S): Given a list of Fire Support Coordination Measures (FSCM), a map covering the area to which the FSCMs apply, plotting equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Develop and plot Fire Support Coordination Measures (FSCMs).
2. Explain the meaning of all Fire Support Coordination Measures (FSCM) and their relationship to the scheme of maneuver.
3. Disseminate Fire Support Coordination Measures (FSCM), as appropriate.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-30, Fire Support For Corps and Division
2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
3. FM 6-20-50, Fire Support For Brigade Operations (Light)
4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
5. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

1. 7400, Warfighting Skills Distance Education Program
2. 8500, Amphibious Warfare Distance Education Program (Phase I)
3. 8600, Amphibious Warfare Distance Education Program (Phase II)

TASK: 0840.02.04 (CORE PLUS) CONSOLIDATE/PROCESS SPOTTER'S LISTS OF TARGETS

CONDITION(S): Given a Fire Support Coordination Measures (FSCM) with all equipment, commander's guidance, spotter's lists of targets, blank target list worksheets, a pencil, and the references.

STANDARD(S): Per the references.

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ENCLOSURE (3)

PERFORMANCE STEPS:

1. Collect and record spotter’s lists of targets and the commander’s guidance.
2. Display the targets on an overlay.
3. Identify conflicts and duplications.
4. Identify targets that violate commander’s guidance and fire support coordination measures.
5. Consolidate all lists of targets into a target list.
6. Ensure planned targets are consistent with the commander’s guidance.
7. Submit the target list to the commander for approval.
8. Disseminate the target list to the appropriate units and agencies.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 4. MCWP 3-16A, Targeting Process
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TASK: 0840.02.05 (CORE PLUS) PREPARE/SUBMIT A LIST OF TARGETS

CONDITION(S): Given targets, complete target information, maps, target list worksheets, pencil, commander’s or platoon leader’s guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Identify and recommend target to the commander.
2. Assign authorized target numbers only.
3. Transfer the target information to the target list worksheet (FS Form 134), properly completing all the information.
4. Annotate approval of the list of targets.
5. Submit the list of targets to the Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0840.02.06 (CORE) PREPARE A TARGET LIST WORKSHEET AND SCHEDULING WORKSHEETS

CONDITION(S): Given a tactical scenario, a map with overlay, plotting equipment, a list of targets, a scheduling worksheet, a target list worksheet, the references, and commander’s guidance.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Identify the five types of target symbols.
2. Plot targets on an overlay.
3. Prepare and submit a target list worksheet.
4. Prepare a scheduling worksheet for a preparation/counter preparation fire (whichever is appropriate, based on the tactical situation), a series, and a group.
5. Utilize the NATO/ABCA targeting numbering system.
6. Identify fire support coordination principles.
7. Identify uses of multiple target engagement (group, series, or program).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 4. MCWP 3-16.1, Marine Artillery Support
 5. MCWP 3-16A, Targeting Process
 6. MCWP 3-42.1, Fire Support in MAGTF Operations
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TASK: 0840.02.07 (CORE) PREPARE A TARGET BULLETIN (TARBUL)

CONDITION(S): Given a target list, target cancellations, a list of targets destroyed, target additions, targets damaged, reactivated targets, corrections to existing target, a Fire Support Coordination Center (FSCC) with all equipment, and a blank Target Bulletin (TARBUL) format.

STANDARD(S): Per the references, ensuring accuracy and proper dissemination of the Target Bulletin (TARBUL).

PERFORMANCE STEPS:

1. Designate the first TARBUL as, "Target Bulletin One".
2. Designate the last TARBUL as, "Final Target Bulletin".
3. Annotate all additions, deletions, cancellations, changes, and updates.
4. Disseminate the TARBULs accordingly.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0840.02.08 (CORE) PRODUCE AN ATTACK GUIDANCE (AG) MATRIX

CONDITION(S): Given a tactical situation, commander's guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Produce high payoff target list.

- 2. Define entries in "how", "when", and "restrictions" columns of the AG matrix.
- 3. Analyze and select entries for each column of the Attack Guidance (AG) matrix.
- 4. Place approved entries into the matrix format.
- 5. Explain the use, level, and location in the Operation's Order (OPORD) or the Attack Guidance (AG) matrix.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 - 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 - 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
 - 4. MCWP 3-16A, Targeting Process
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TASK: 0840.02.09 (CORE) PREPARE THE FIRE SUPPORT EXECUTION MATRIX

CONDITION(S): Given the maneuver commander's guidance, the execution paragraph of the OPORD, the target list, fire support requirements, fire support situation map, tactical situation overlay, paper, plotting equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Construct the matrix.
- 2. Allocate fires and fire support tasks according to the scheme of maneuver and the fire support plan.
- 3. Disseminate the completed matrix to all spot teams and other subordinate units involved.
- 4. Monitor the operation to ensure the plan in the matrix is implemented correctly and changed, as necessary.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 - 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 - 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 - 4. MCWP 3-16.1, Marine Artillery Support
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TASK: 0840.02.10 (CORE) PREPARE THE ATF TARGET LIST

CONDITION(S): Given the list of targets, commander's guidance, Operation's Order (OPORDER) for an amphibious landing, and the references.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Analyze list of targets.
- 2. Classify targets A-E.
- 3. Prioritize targets I-IV.

4. Place targets in the appropriate part (I-VII) of the ATF target list, per the commander's guidance.

5. Label target information on the target list worksheet.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Capt

REFERENCE(S):

1. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

TASK: 0840.02.11 (CORE PLUS) PREPARE A HIGH-PAYOFF TARGET LIST (HPTL)

CONDITION(S): Given a target list, commander's guidance, high value target list, target value analysis information, the references, and the Operations Order (OPORDER).

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Using the high-value target list, determine which targets should be attacked in order to achieve commander's intent.

2. Record high-payoff targets.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. MCWP 3-16, Fire Support Coordination

2. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

TASK: 0840.02.12 (CORE PLUS) PREPARE A TARGET PRECEDENCE LIST

CONDITION(S): Given a target list, commander's guidance, high-payoff target list, Operation's Order (OPORDER), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Analyze the High-Payoff Target List (HPTL).

2. Prioritize high-payoff targets.

3. Record target precedence list.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. MCWP 3-16, Fire Support Coordination

2. MCWP 3-16A, Targeting Process

TASK: 0840.02.13 (CORE PLUS) SUPERVISE THE OPERATIONS OF A FIRE SUPPORT COORDINATION CENTER (FSCC)

CONDITION(S): Given a Fire Support Coordination Center (FSCC) complete with personnel and equipment, a tactical situation requiring FSCC operations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Obtain the commander's concept of fire support and develop the overall fire support plan with the commander and operations officer.

2. Supervise and coordinate the development of the supporting arms plans to execute the overall fire support tasks.
3. Supervise the preparation of fire plans by resolving conflicts regarding selection of targets, assignment of fire support means, type and method of fire supporting, and timing or scheduling of missions or fires.
4. Review fire plans to ensure they can be implemented with the fire support means available and, if necessary, coordinate with the operations officer and commander to modify plans or secure additional means.
5. Ensure chemical and conventional fires are fully coordinated.
6. Ensure unnecessary duplication of fires is eliminated.
7. Ensure plans of the various supporting arms are coordinated.
8. Ensure adequate fires are planned on targets and critical areas.
9. Ensure troop safety criteria are met.
10. Ensure all supporting arms are efficiently used.
11. Present the fire support plan to the commander.
12. Assist supporting arms representatives in selection of coordination measures and recommend them to the commander for approval.
13. Approve and institute airspace coordination areas and any plans for trajectory limitations to ensure the safety of aircraft and the coordination of the other supporting arms with air operations.
14. Obtain clearance and coordinate strikes or missions of supporting arms which might endanger or hinder the operations of an element of the amphibious task force.
15. Ensure the Fire Support Coordination Center (FSCC) receives and disseminates available target information to all staff sections and commands requiring the information.
16. Coordinate with the Target Information Officer (TIO) and the commander and his staff in the selection of targets and assignment of classification and attack priorities.
17. Maintain close liaison and working relations with the operations officer and the intelligence officer to ensure the most effective planning and application of fire support.
18. Coordinate with the operations officer and ensure timely and adequate warning of the delivery of chemical munitions to all appropriate commands.
19. Ensure the situation map is maintained and necessary operational records of the Fire Support Coordination Center (FSCC) are kept.
20. Ensure the most effective means of attacking targets is used.
21. Ensure target classifications and attack priorities are correctly assigned.
22. Supervise the coordination of cross boundary fires.
23. Supervise the collection and dissemination of target data to include target lists and target bulletins. If the Fire Support Coordination Center (FSCC) is not the senior FSCC, submit a list of targets, accordingly.
24. Transmit the necessary enemy information collected at the Fire Support Coordination Center (FSCC) to all applicable artillery units.
25. Perform other command and liaison duties as directed by the commander.
26. Supervise the performance of those assigned to operate in the Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. ATP-4(D), Allied Spotting Procedures for Naval Gunfire Support
 2. FM 6-20-30, Fire Support For Corps and Division
 3. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 4. FM 6-20-50, Fire Support For Brigade Operations (Light)
 5. FM 6-30, Observed Fire Procedures
 6. FMFM 5-1, Marine Aviation
 7. FMFM 5-4, Offensive Air Support
 8. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 9. MCWP 3-16.1, Marine Artillery Support
 10. MCWP 3-16A, Targeting Process
 11. MCWP 3-42.1, Fire Support in MAGTF Operations
 12. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations
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TASK: 0840.02.14 (CORE PLUS) DEVELOP A QUICK FIRE SUPPORT PLAN

CONDITION(S): Given a tactical situation where time limits preclude formal fire planning, communications with a direct support (DS) ship, the Fire Direction Center (FDC) and Fire Support Coordination Center (FSCC), the commander's guidance, DA Form 5368-R (Quick Fire Plan), priority of fires, a minimum of five targets, knowledge of available fire support assets, order and timing of target engagement, duration of fires, references, H-hour, and a pencil.

STANDARD(S): Per the references and within 20 minutes.

PERFORMANCE STEPS:

1. Obtain the commander's guidance.
2. Complete DA Form 5368-R.
3. Issue situation report and warning order to the appropriate Fire Support Coordination Center (FSCC) and firing units.
4. Collect information on the availability and status of mortars, Field Artillery (FA), Naval Gunfire (NGF), and Close Air Support (CAS) to support the mission.
5. Select targets.
6. Obtain the commander's approval of the targets.
7. Complete and transmit the target list portion of DA Form 5368-R.
8. Schedule targets on DA Form 5368-R, per commander's guidance.
9. Transmit the schedules to the firing units.
10. Brief the observers.
11. Report to the commander when the firing units are ready.
12. Amend the plan, as necessary, based on the situation and the commander's desires.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

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REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0840.02.15 (CORE PLUS) POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)

CONDITION(S): Given a mounted map covered with acetate, plotting equipment, a list of current tactical information, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Plot boundary, coordinating points, maneuver control points and other maneuver control measures.
- 2. Plot locations of all friendly units, including target acquisition assets.
- 3. Plot all coordination measures.
- 4. Plot all targets.
- 5. Plot enemy units.
- 6. Plot locations of subordinate units of a supported maneuver unit.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols
- 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0840.02.16 (CORE PLUS) PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)

CONDITION(S): Given a situation map, overlay material, plotting equipment, the location and type of all supporting fires (to include mortars, field artillery and Naval Surface Fire Support), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Attach a sheet of overlay paper on the situation map.
- 2. Write the marginal information on the overlay.
- 3. Plot and label the orienting grid register marks on the overlay.
- 4. Plot and label the location of all supporting arms units.
- 5. Plot and label the range capability of all indirect fire weapons that can provide fire support in the maneuver zone.
- 6. Plot and label all fire support coordination measures.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols

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2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0840.02.17 (CORE PLUS) LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM

CONDITION(S): Given the target production map, the visibility overlay, target acquisition visibility diagrams, plotting equipment, an assistant, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Plot the visibility diagrams on the visibility overlay.
2. Identify all defilade areas.
3. Recommend moving target acquisition assets to reduce the defilade areas.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 4. MCWP 3-42.1, Fire Support in MAGTF Operations
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TASK: 0840.02.18 (CORE PLUS) EVALUATE TARGETING INFORMATION

CONDITION(S): Given a target production map, the Target Selection Standards (TSS), current friendly and enemy situations, incoming messages, SHELREPs, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Record and post SHELREP information.
2. Check the grid report against the Target Selection Standards (TSS).
3. Record the targets and suspected targets.
4. Plot the targets and suspected targets on the target production map.
5. Check new information and SHELREPs for correlation with posted suspected targets and rays.
6. Post correlated information to appropriate target cards (when target indicators become targets, per Target Selection Standards (TSS)).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 4. MCWP 3-42.1, Fire Support in MAGTF Operations
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TASK: 0840.02.19 (CORE PLUS) COORDINATE FIRES ACROSS BOUNDARIES

CONDITION(S): Given a tactical scenario, a situation map complete with boundaries and fire support coordination measures, plotting equipment, a situation overlay, a fire support status chart, the commander's concept of operations, a functioning Fire Support Coordination Center (FSCC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Plot targets.
2. Determine target location zone.
3. Coordinate the fire request with other effected fire support means (air, artillery, naval surface fire support, and mortars).
4. Contact the appropriate fire support agency or Fire Support Coordination Center (FSCC), as necessary.
5. Use the fastest and most appropriate coordination net.
6. Coordinate, if necessary, with the appropriate agencies by voice or digital means.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
4. MCWP 3-42.1, Fire Support in MAGTF Operations

TASK: 0840.02.20 (CORE PLUS) ANALYZE TARGETS TO DETERMINE PRECEDENCE, TYPES, AND QUANTITIES OF FIRE TO BE USED FOR ENGAGING TARGETS

CONDITION(S): Given a Fire Support Coordination Center (FSCC) with all necessary equipment, commander's guidance, a target list, a high payoff target list, attack guidance matrix, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine which target set the target belongs to.
2. Determine whether the target type has been designated for special priority or attack.
3. Determine precedence of attack from the high payoff target list.
4. Examine the attack guidance matrix for general target set and specific target type attack instructions.
5. Pass the target, along with the recommended type and quantity of fire, to the correct attack agency or agencies.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-30, Fire Support For Corps and Division
2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
3. FM 6-20-50, Fire Support For Brigade Operations (Light)

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4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0840.02.21 (CORE PLUS) PASS FIRE SUPPORT INFORMATION TO LOWER, ADJACENT, AND HIGHER FIRE SUPPORT COORDINATION CENTERS

CONDITION(S): Given the situation map, a target list, plotting equipment, a fire support status chart, a fire support capabilities overlay, the commander's concept of operations, a functioning Fire Support Coordination Center (FSCC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Provide targeting information for planned targets.
2. Relay fire missions on targets of opportunity, as required.
3. Determine and/or disseminate fire support measures.
4. Determine observer status.
5. Disseminate targeting priorities and target attack procedures list.
6. Provide additional fire support guidance to spot teams.
7. Coordinate positional approval and clearance.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-30, Fire Support For Corps and Division
 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 5. MCWP 3-42.1, Fire Support in MAGTF Operations
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TASK: 0840.02.22 (CORE PLUS) MONITOR/COORDINATE REQUESTS FOR NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given the situation map, plotting equipment, Naval Gunfire (NGF) support, Naval Gunfire Liaison Officer (NGLO) to provide assistance, a situation overlay, a fire support status chart, a fire support capability overlay, a functioning Fire Support Coordination Center (FSCC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Monitor the call for fire or request for Naval Gunfire (NGF) support.
2. Determine whether the request should be approved on the basis of the use of organic maneuver weapons, field artillery, or air, and the application of fire support coordination principles.
3. Coordinate with all necessary fire support agencies to provide safe and integrated fires.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)

- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 - 4. MCWP 3-42.1, Fire Support in MAGTF Operations
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TASK: 0840.02.23 (CORE PLUS) PLAN/COORDINATE FIRE SUPPORT TO SUPPRESS ENEMY AIR DEFENSES

CONDITION(S): Given the situation map, plotting equipment, a situation overlay, a preplanned or immediate CAS request, a fire support status chart, commander’s guidance, a target list, a high payoff target list, attack guidance matrix, a functioning Fire Support Coordination Center (FSCC), known enemy Air Defense Artillery (ADA) targets, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Evaluate the threat posed by enemy Air Defense Artillery (ADA) in your zone.
- 2. Plan fires on Air Defense Artillery (ADA) targets.
- 3. Select the best agency to locate or observe the Air Defense Artillery (ADA) targets.
- 4. Monitor CAS requests (planned and immediate) and coordinate Suppression Enemy Air Defense (SEAD) fires.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Capt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 4. MCWP 3-42.1, Fire Support in MAGTF Operations

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MOS 0842, FIELD ARTILLERY RADAR OPERATOR

DUTY AREA 01 - COMMUNICATIONS

TASK: 0842.01.01 (CORE) ESTABLISH, ENTER, AND LEAVE A RADIO NET

CONDITION(S): Given a tactical or nontactical situation, radio set installed and operational, CEOI, distant operational station serving as the Net Control Station (NCS), references, and under all weather conditions.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Establish a radio telephone net.
 - a. Extract appropriate call signs, suffixes, and frequency from the unit CEOI.
 - b. Prepare and operate the appropriate radio set.
 - c. Identify the net structure and determine the answering sequence.
2. Enter a radio telephone net.
 - a. Use unabbreviated call signs except when directed by the Net Control Station (NCS) to use full call signs.
 - b. Authenticate when challenged by Net Control Station (NCS).
 - c. If you fail to answer a multiple or collective call sign in sequence, wait until all other stations have answered; then answer.
3. Leave and close a net.
 - a. Request permission to leave the net from the Net Control Station (NCS).
 - b. Inform the Net Control Station (NCS) of the reason for leaving the net.
 - c. Authenticate upon direction of the Net Control Station (NCS) before leaving the net.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. ACP 125, US SUPP 1, Allied Communication Publication
2. CEOI, Communications-Electronic Operating Instructions
3. FM 24-1, Combat Communications
4. FM 24-18, Communications Techniques
5. TC 24-1, Tactical Communications Doctrine
6. TM 11-5820-890-10-1, SINCGARS Operator's Manual

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
2. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0842.01.02 (CORE) IDENTIFY ELECTRONIC COUNTERMEASURES (ECM) AND IMPLEMENT ELECTRONIC COUNTER-COUNTERMEASURES

CONDITION(S): Given a radio set, applicable operator's technical manual, a CEOI extract, and the references.

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STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine if Electronic Countermeasures (ECM) are being employed.
 - a. Check for accidental or unintentional interference.
 - b. Check for intentional interference.
2. Initiate operator's procedures.
3. Identify jamming signals.
4. Employ antijamming measures.
5. Use high power, if possible.
6. Minimize transmissions.
7. Talk in short bursts.
8. Submit a MIJI 1 report.
9. Continue to operate.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. CEOI, Communications-Electronic Operating Instructions
 2. FM 24-1, Combat Communications
 3. FM 24-33, Communications Tech Electronic Counter-Countermeasures
 4. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
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TASK: 0842.01.03 (CORE) PREPARE AND OPERATE SINGGARS SERIES RADIOS

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, SINGGARS series radio set, vehicle with appropriate installation kit, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Install the receiver-transmitter.
 - a. Secure the receiver-transmitter to the mount.
 - b. Make the proper RF cable connections.
 - c. Connect the appropriate microphone, headset, and loudspeaker.
2. Install the R-442(s), as appropriate.
 - a. Secure the receiver(s) to the mount.
 - b. Make the proper RF cable connections.
 - c. Connect the headset and loudspeaker, as appropriate.
3. Install the appropriate antenna.
 - a. Assemble the antenna elements.
 - b. Mount the assembled elements in the pre-installed base(s).

- c. Make the proper RF cable connections.
4. Determine operating frequency from current edition of CEOI.
5. Establish initial communications.
6. Perform stopping procedures.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5820-890-10-1, SINCGARS Operator's Manual

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
2. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

DUTY AREA 02 - INSTALLATION OF THE RADAR SET AN/TPQ-46

TASK: 0842.02.01 (CORE) EMPLACE THE RADAR SET AN/TPQ-46

CONDITION(S): Given a radar set AN/TPQ-46 trailer in a field location connected to a prime mover, a driver, one assistant, a surveyed and marked radar site, section tools and equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Locate the trailer over the site stake.
2. Uncouple the trailer from the prime mover.
3. Level the trailer.
4. Ground the trailer.
5. Remove the antenna cover.
6. Erect the antenna.
7. Open the trailer vent.
8. Locate the radar shelter.
9. Ground the radar shelter.
10. Connect wire lines.
11. Open all shelter vents.
12. Connect the system cables.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.02.02 (CORE) BORESIGHT THE RADAR SET AN/TPQ-46 ANTENNA

CONDITION(S): Given a shelter operator, the reference, a radar set AN/TPQ-46 emplaced in a field location with initialization completed to the prompt, ANT POS, identified far stake, a shelter operator, and the reference.

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STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Align the boresight to the End of Orienting Line (EOL).
2. Stow the boresight scope.
3. Enter YES to ANT POS.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.02.03 (CORE) GATHER INITIALIZATION DATA FOR RADAR SET AN/TPQ-46

CONDITION(S): Given a tactical mission, primary and alternate radar sites, references, and access to the appropriate data.

STANDARD(S): Per the references, recording accurate data on the Initialization Worksheet.

PERFORMANCE STEPS:

1. Obtain site data from Modular Azimuth Positioning System (MAPS) or Survey section.
2. Obtain meteorological data.
3. Obtain Weapons Location Unit (WLU) map data.
4. Obtain Auto Height Correction (AHC) data.
5. Obtain manual height data.
6. Obtain search data from Radar Deployment Order (RDO).
7. Obtain or verify adaptation constants.
8. Obtain manual terrain following data.
9. Obtain zone data.
10. Obtain communications data.
11. Complete the Initialization Worksheet.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36
-

TASK: 0842.02.04 (CORE) PREPARE THE RADAR SET AN/TPQ-46 COMMON SHELTER FOR OPERATION

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field, a situation map, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

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1. Connect the shelter cables.
2. Ground the shelter.
3. Open all vents.
4. Install the map on the Weapons Location Unit (WLU).
5. Ensure the initialization data is correct.
6. Erect communications antennas, as necessary.
7. Establish communications.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5820-890-10-1, SINCGARS Operator's Manual
 2. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
 3. TM 11-5985-357-13, Ant Group OE-254/GRC
-

TASK: 0842.02.05 (CORE) PERFORM THE RADAR SET AN/TPQ-46 STARTUP PROCEDURES

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure the power panel controls are at the NORMAL positions.
2. Start the generator.

DUTY AREA 03 - RADAR OPERATIONS

TASK: 0842.03.01 (CORE) INITIALIZE THE RADAR SET AN/TPQ-46

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location with the antenna boresighted, a magnetic tape cassette, completed initialization data worksheets, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Perform the Cartridge/Printer Control (CPC) test.
2. Perform the Central Processing Unit/Input Output Control (CPU/IOC) test.
3. Perform the memory test.
4. Load the initialization program.
5. Enter the initialization data from the Initialization Worksheet.
6. Verify data against a function 60 printout before entering YES to prompt GO.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

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TASK: 0842.03.02 (CORE) INSTALL A NEW MAP ON THE WEAPONS LOCATION UNIT (WLU) MAP DRUM FOR RADAR SET AN/TPQ-46

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location, a sector of search, map sections, a ruler, scissors, mending tape, a grid scale, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Press DRUM ON/DRUM OFF switch lamp to DRUM OFF.
2. Clear fault lamp indicator.
3. Install map onto weapons location unit map drum.
4. Press DRUM ON/DRUM OFF switch lamp to DRUM ON.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.03.03 (CORE) LOAD THE DIGITAL TERRAIN MAP FOR RADAR SET AN/TPQ-46

CONDITION(S): Given an operational radar set AN/TPQ-46 emplaced in a field location, digital terrain map, correct auto height data, nominal antenna azimuth value, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Bootstrap the computer.
2. Load initialization program.
3. Install the digital terrain map cassette.
4. Select the auto height correction input.
5. Enter the maximum range of interest.
6. Enter the nominal antenna azimuth.
7. Enter YES to prompt GO if entered height is correct.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
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TASK: 0842.03.04 (CORE) ENTER/DELETE ZONES ON RADAR SET AN/TPQ-46

CONDITION(S): Given an operational radar set AN/TPQ-46 emplaced in a field location, censor, CFZ, Call For Fire (CFF), and ATIZ zone data with the zone parameters identified, deletion data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Enter zones at the keyboard.
2. Enter zones on the B-scope using the cursor and the track ball.

3. Enter zones using the track ball to position the lighted spot on the site map.
4. Delete zones at the keyboard.
5. Delete zones by positioning the cursor on the B-scope.
6. Delete zones by posting the lighted spot on the site map.
7. Store zones as received digitally.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.03.05 (CORE) PERFORM DIGITAL COMMUNICATIONS

CONDITION(S): Given a tactical scenario, radar set AN/TPQ-46 emplaced in a field location, radar team personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Coordinate and establish communications on the nets specified by the communications plan.
2. Supervise the construction and transmission of the following digital messages:
 - a. Priority target report - FM;CFF.
 - b. Fire mission - FM;FOCMD.
 - c. Free text - SYS;PTM.
 - d. Registration report - FM;SUBS.
 - e. Radar ready - FM;SUBS.
 - f. Radar location - FM;OBCO.
 - g. Target report - ATI;CDR.
 - h. Communications test - MD;RCV5.
 - i. Check firing.
3. Supervise the interpretation of the following received digital messages:
 - a. Fire mission - FM;FMCOD.
 - b. Free text - SYS;PTM.
 - c. Radar ready/registration - FM;SUBS.
 - d. Friendly fire battery - FM;MTO.
 - e. Friendly fire battery - FM;INTM.
 - f. Radar location - FM;OBCO.
 - g. Met data.
 - h. Radar search area - SPRT;SEARCH.
 - i. Priority/censor zone - SPRT;FILTER.

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- j. Communications test - MD;XMT5.
- k. Acknowledgment/Negative Acknowledgment - ACK/NAK.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: The following Individual Training Standards can be referred to and may be prerequisites to successful accomplishment of this task: 0842.01.01, 0842.01.02, 0842.01.03.

TASK: 0842.03.06 (CORE) OPERATE THE RADAR SET AN/TPQ-46 IN THE HOSTILE MODE

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location with the operational program loaded, operating parameter changes, communications net data, and the reference.

STANDARD(S): Per the reference, locating targets with +/- 10 meters altitude, transmitting target data and performing correct action during EW conditions.

PERFORMANCE STEPS:

- 1. Enter the new hostile search parameters.
- 2. Press the RADIATE ON switch lamp.
- 3. Process the hostile weapon locations using height correction.
- 4. Transmit weapons locations to reporting agent.
- 5. Follow cueing guidance, as prescribed in Employment Order.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	1.000 EA	0.000 EA	0.000 EA
D544	PROJ 155MM, HE, M107	1.000 EA	0.000 EA	0.000 EA
N340	FUZE, PD, M739 May use N335, M577 PD SQ/D	1.000 EA	0.000 EA	0.000 EA
N523	PRIMER, PERCUSSION, M82	1.000 EA	0.000 EA	0.000 EA

ADMINISTRATIVE INSTRUCTIONS: For hostile fire mode training, friendly firing units are used as simulated enemy indirect fire units. In order to do so, the radar must be positioned so that it can "observe" / "catch" rounds being fired toward and slightly offset to its search pattern, i.e. oriented near or along the hostile firing unit’s back azimuth of fire.

Therefore, ensure that an NFA is established around the radar location to mitigate risk in firing toward the radar.

The radar operator will track rounds in-flight that are being used in conjunction with other artillery training requirements.

TASK: 0842.03.07 (CORE) RECALL/DELETE HOSTILE WEAPONS LOCATIONS ON RADAR SET AN/TPQ-46

CONDITION(S): Given an operational radar set AN/TPQ-46 emplaced in a field location, a list of hostile weapons locations to be recalled or deleted, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Recall the single hostile weapon location.
2. Recall the series of hostile weapons locations.
3. Obtain the printout of the stored locations.
4. Delete the displayed location.
5. Delete the single stored location.
6. Delete the series of locations.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.03.08 (CORE) PREPARE THE FRIENDLY FIRE DATA WORKSHEETS FOR RADAR SET AN/TPQ-46

CONDITION(S): Given an operational radar set AN/TPQ-46 emplaced in a field location, pencil and paper, a friendly fire data worksheet, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine and record the submode of friendly fire to be displayed.
2. Record the friendly fire parameters.
3. Record the friendly fire buffers.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
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TASK: 0842.03.09 (CORE) OPERATE THE RADAR SET AN/TPQ-46 IN THE FRIENDLY FIRE MODE

CONDITION(S): Given the radar set AN/TPQ-46 emplaced in a field location, operating in friendly fire mode parameter, data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Enter the friendly fire search parameters.
2. Select buffer to be used for friendly fire.
3. Select the friendly fire mode.
4. Press the RADIATE ON switch lamp.
5. Process the friendly fire targets.

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INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

TASK: 0842.03.10 (CORE PLUS) ADJUST INDIRECT FIRE WITH THE RADAR SET AN/TPQ-46

CONDITION(S): Given a radar set AN/TPQ-46, a call for fire with the target identified by grid and altitude, and the reference.

STANDARD(S): Per the reference, using only one round in adjustment, and announcing final grid within 1 minute of round intercept.

PERFORMANCE STEPS:

1. Receive and record the Call For Fire (CFF).
2. Enter the friendly mode of operation.
3. Transmit final grid.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7	2.000 EA	2.000 EA	8.000 EA
D544	PROJ 155MM, HE, M107	2.000 EA	2.000 EA	8.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D	2.000 EA	2.000 EA	8.000 EA
N523	PRIMER, PERCUSSION, M82	2.000 EA	2.000 EA	8.000 EA

ADMINISTRATIVE INSTRUCTIONS: One round will be used to adjust and one round will be used in FFE.

TASK: 0842.03.11 (CORE PLUS) OBSERVE REGISTRATION FOR INDIRECT FIRE WITH THE RADAR SET AN/TPQ-46

CONDITION(S): Given a radar set AN/TPQ-46, the order to conduct a high burst or impact registration, and the reference.

STANDARD(S): Per the reference, transmitting data within 1 minute of round intercept.

PERFORMANCE STEPS:

1. Receive and record the message to observer.
2. Enter friendly fire data into the radar computer.
3. Enter the friendly mode of operation.
4. Observe and record data to each round.
5. Transmit data to the Fire Direction Center (FDC).
6. Receive and record "END OF MISSION" from Fire Direction Center (FDC).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7	8.000 EA	8.000 EA	32.000 EA
D544	PROJ 155MM, HE, M107	8.000 EA	8.000 EA	32.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D; or N248 MT M565	8.000 EA	8.000 EA	32.000 EA
N523	PRIMER, PERCUSSION, M82	8.000 EA	8.000 EA	32.000 EA

TASK: 0842.03.12 (CORE) DESTROY RADAR EQUIPMENT

CONDITION(S): Given a radar section with all equipment and personnel, a simulated/actual emergency wherein the position is about to be overrun, the order to perform emergency destruction on equipment, and the references.

STANDARD(S): Per the references, effectively rendering the equipment useless (SIMULATED destruction for training purposes).

PERFORMANCE STEPS:

- 1. Select the most appropriate method to destroy the following equipment:
 - a. Magnetic tape and all classified information.
 - b. Signal processor.
 - c. Radios and COMSEC equipment.
 - d. Transmitter unit.
 - e. Receiver/exciter unit.
 - f. Antenna and BSU.
 - g. Cables.
 - h. Generator.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36
- 2. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

DUTY AREA 04 - PREPARATION FOR MOVEMENT

TASK: 0842.04.01 (CORE) PERFORM THE RADAR SET AN/TPQ-46 SHUTDOWN PROCEDURES

CONDITION(S): Given an operational radar set AN/TPQ-46 emplaced in a field location and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Press the RADIATE OFF switch lamp.

- 2. Press the HV OFF switch lamp.
- 3. Position the antenna to the stow position.
- 4. Rewind the computer program magnetic tape.
- 5. Press the SYSTEM POWER OFF switch lamp.
- 6. Set the RADIO CONTROL switch to REMOTE.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.04.02 (CORE) PREPARE THE RADAR SET AN/TPQ-46 FOR MOVEMENT BY TRUCK

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location, a driver, one assistant, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Stow the antenna and secure stabilization bars.
- 2. Install the antenna weather cover.
- 3. Stow the primary power cable.
- 4. Lower the leveling jacks, and stow legs and jack pads.
- 5. Stow the trailer ground rod and ground strap.
- 6. Secure the trailer equipment.
- 7. Check the system for loose items.
- 8. Couple the trailer to the truck.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.04.03 (CORE PLUS) PREPARE THE RADAR SET AN/TPQ-46 FOR MOVEMENT BY HELICOPTER

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location with the shelter mounted on a vehicle, a driver, one assistant, necessary airlift slings, equipment, and the reference.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Secure all equipment inside the shelter and remove pressurization plug.
- 2. Install the shelter/vehicle lift slings.
- 3. Disconnect the antenna trailer from the prime mover.
- 4. Install the radar trailer lift slings.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Cpl

REFERENCE(S):

- 1. FM 55-450-1, Army Helicopter External Load Operations
- 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

DUTY AREA 05 - PREVENTIVE MAINTENANCE CHECKS AND SERVICES

TASK: 0842.05.01 (CORE) PERFORM OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE RADAR SET AN/TPQ-46

CONDITION(S): Given an operational radar set AN/TPQ-46 emplaced in a field location, section tools and equipment, cleaning materials, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Perform routine checks and services.
- 2. Check Preventive Maintenance Checks and Services (PMCS) procedures.
- 3. Perform lubrication procedures.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. LO 11-5840-354-10, Lubrication Order for Radar Set AN/TPQ-36
- 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0416, The Marine Corps Publications and Directives System

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.05.02 (CORE) PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON GENERATOR SET MEP-813A

CONDITION(S): Given a generator set MEP-813A in a field location, section tools, and applicable references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Perform before-operation Preventive Maintenance Checks and Services (PMCS).
- 2. Perform during-operation Preventive Maintenance Checks and Services (PMCS).
- 3. Perform after-operation Preventive Maintenance Checks and Services (PMCS).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. DA PAM 738-750, The Army Maintenance Management System (TAMMS)
- 2. TM-09247A/09248A-24-1, Operator and Organizational Maintenance Manual for Generator Set

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0416, The Marine Corps Publications and Directives System

ADMINISTRATIVE INSTRUCTIONS: Safety precautions must be followed.

TASK: 0842.05.03 (CORE) PERFORM OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON SINCGARS SERIES RADIO

CONDITION(S): Given a tactical or nontactical situation, SINCGARS series radio, vehicle with mounting facilities installed, clean, lint free cloth, a brush, trichloroethane, the references, and under all weather conditions.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Perform routine checks.
- 2. Perform operator’s daily Preventive Maintenance Checks and Services (PMCS).
- 3. Perform operator’s weekly Preventive Maintenance Checks and Services (PMCS).
- 4. Perform operator’s monthly Preventive Maintenance Checks and Services (PMCS).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5820-890-10-1, SINCGARS Operator’s Manual

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0416, The Marine Corps Publications and Directives System

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MOS 0844, FIELD ARTILLERY FIRE CONTROL MAN

1 - BATTERY COMPUTER SYSTEM (BSC) GENERAL

TASK: 0844.01.01 (CORE) PREPARE THE BATTERY COMPUTER SYSTEM (BCS) FOR OPERATION

CONDITION(S): Given a High Mobility Multipurpose Wheeled Vehicle (HMMWV) with mounts for the Battery Computer System (BCS), Gun Display Units (GDU), enough cables and slash wire for installation, two Marines to assist with the installation, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Setup LCU Remington Rack.
2. Connect appropriate cables to the LCU.
3. Install the Hard Disk Drive (HDD).
4. Connect the Gun Display Units (GDUs) to the LCU.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
 2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0844.01.02 (CORE PLUS) DESTROY THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a simulated/actual scenario wherein the unit is about to be overrun, the need to destroy the Battery Computer System (BCS) to prevent enemy use, a Battery Computer System (BCS), the material used to destroy a Battery Computer System (BCS), and the reference.

STANDARD(S): Per the reference, effectively rendering the Battery Computer System (BCS) useless. (SIMULATE destruction for training purposes.)

PERFORMANCE STEPS:

1. Demonstrate how to destroy the Battery Computer System (BCS).
2. Simulate how to check to ensure the Battery Computer System (BCS) is inoperable.
3. Ensure the Hard Disk Drive (HDD) is destroyed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)
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DUTY AREA 02 - BATTERY COMPUTER SYSTEM (BCS) INITIALIZATION AND DATA BASE

TASK: 0844.02.01 (CORE) INITIALIZE THE BATTERY COMPUTER SYSTEM (BCS) AND CONSTRUCT AND RECORD A DATA BASE

CONDITION(S): Given an operational Battery Computer System (BCS), data base information, unit Standing Operating Procedures (SOP), map of operational area, a current operations order, firing unit information, a current computer met message, observer information, target/known point information, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Power up the Battery Computer System (BCS) components.
2. Load the hard disk.
3. Load applicable weapons dependent program.
4. Enter information in linked formats.
5. Enter MET, MVVs, geometry, observer, and target/known point information.
6. Record the data base.
7. Perform power down procedures.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.02.02 (CORE) LOAD AND UPDATE A PREVIOUSLY RECORDED DATA BASE USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with previously recorded data base, current data base information, unit Standing Operating Procedures (SOP), map of operational area, a current operations order, firing unit information, a current computer MET message, observer information, target/known point information, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Load the hard disk drive.
2. Perform power up procedures.
3. Load previously recorded data base.
4. Update linked formats, as required.
5. Update other information, as required.
6. Record updated data base.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.02.03 (CORE) PERFORM OPERATOR AND ORGANIZATIONAL MAINTENANCE ON THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Battery Computer System (BCS) with power source connected, and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

- 1. Verify power source is operational.
- 2. Verify equipment and cables are properly connected and serviceable.
- 3. Perform operator checks and services.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
 - 2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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DUTY AREA 03 - BATTERY COMPUTER SYSTEM (BCS) COMMUNICATIONS AND ERROR MESSAGES

TASK: 0844.03.01 (CORE) PROCESS PLAIN TEXT INFORMATION USING THE SYS;PTM MESSAGE

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, a SYS;PTM message format in the input queue, the alarm sounding, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Display the SYS;PTM message format.
- 2. Review the message.
- 3. Record the information.
- 4. Take action, as appropriate.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
 - 2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
-

TASK: 0844.03.02 (CORE) TRANSMIT PLAIN TEXT INFORMATION USING THE SYS;PTM MESSAGE

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, a plain text message requiring transmission, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Complete the SYS;PTM message format.
- 2. Review and transmit the SYS;PTM message format.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
 - 2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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MCO 3501.26A
11 Apr 00

TASK: 0844.03.03 (CORE) TAKE CORRECTIVE ACTION ON ERROR AND WARNING MESSAGES USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational BCS with a recorded data base entered, an error or warning message(s) on the display, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Take corrective action on an error message.
2. Take corrective action on a warning message.
3. Take corrective action on system warnings.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

DUTY AREA 04 - BATTERY COMPUTER SYSTEM (BCS) FIRE MISSION PROCESSING

TASK: 0844.04.01 (CORE) PROCESS AN AREA FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with recorded current data base (all or part of the Gun Display Units (GDUs) may be out), communications with an observer (observer may not have digital communications), unit Standing Operating Procedures (SOP), a fire order SOP, fire command standards, a Call For Fire (CFF), a fire order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Display message format and enter Call For Fire (CFF) information or announce CFF information.
2. Enter appropriate information based on the fire order; edit and execute format.
3. Transmit related messages (fire commands, MTO, shot, splash and rounds complete), as appropriate.
4. Process subsequent corrections and end of mission, as required.
5. Record data base, as directed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

ADMINISTRATIVE INSTRUCTIONS: Include Low and High Angle HE, Low Angle WP, M825 Smoke, HC Smoke, DPICM, APICM, Illum (1 Gun Illum, 2 Gun Range and 2 Gun Lateral Spread, 4 Gun Range and Lateral Spread and Coordinated Illum), and Extended Range Projectile.

DUTY AREA 05 - BATTERY COMPUTER SYSTEM (BCS) REGISTRATIONS AND REGISTRATION CORRECTIONS

TASK: 0844.05.01 (CORE) PROCESS A PRECISION REGISTRATION USING THE BATTERY COMPUTER SYSTEM (BCS)

Annex VI to
Appendix F to
ENCLOSURE (3)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, a registration fire order, communications with an observer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Transmit the MTO to initiate a precision registration.
2. Process the precision registration.
3. Compute and store residuals.
4. Record data base.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

ADMINISTRATIVE INSTRUCTIONS: Include all forms of abbreviated registrations.

TASK: 0844.05.02 (CORE) UPDATE REGISTRATION CORRECTIONS USING METEOROLOGICAL INFORMATION WITH THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS), recorded data base, registration corrections from a prior registration, new MET information that was valid during the registration, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Update the data base.
2. Update the AFU;REG.
3. Record database (DRI).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
 2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
-

TASK: 0844.05.03 (CORE PLUS) UPDATE REGISTRATION CORRECTIONS USING SURVEY INFORMATION WITH THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS), a recorded data base, registration corrections from a prior registration, new survey information that was valid during the registration, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Update the data base.
2. Update the AFU;REG.
3. Record Database (DRI).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
- 2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.05.04 (CORE) PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI)/RADAR REGISTRATION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS), a recorded data base, a registration fire order, communications with an observer (2 observers for High Burst/Mean Point of Impact (HB/MPI), 1 observer for laser or a radar), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Transmit warning order to the observer to conduct a High Burst/Mean Point of Impact (HB/MPI) registration.
- 2. Enter registration data.
- 3. Transmit orienting data to observer(s).
- 4. Enter observer(s) spottings.
- 5. Compute and store residuals.
- 6. Record data base.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
- 2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

ADMINISTRATIVE INSTRUCTIONS: Include all forms of abbreviated registrations.

DUTY AREA 06 - BATTERY COMPUTER SYSTEM (BCS) SPECIAL SITUATIONS

TASK: 0844.06.01 (CORE) PROCESS REPLOT USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, a situation map, an active fire mission with a request to end the mission and record it as a target, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Display the related message.
- 2. Edit and enter appropriate information.
- 3. Reprocess until contour interval is within tolerance.
- 4. Conduct data base recording, as directed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

Annex VI to
Appendix F to
ENCLOSURE (3)

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.06.02 (CORE PLUS) DERIVE A GRAPHICAL FIRING TABLE (GFT) SETTING AND TERRAIN GUN POSITION CORRECTIONS (TGPCS) USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, operations order, situation map, manual Fire Direction Center (FDC) capability, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine base piece and add base piece location to observer file.
2. Conduct dry fire mission using polar method.
3. Record base piece firing data.
4. Construct and apply Graphical Firing Table (GFT) setting.
5. Determine and record Terrain Gun Position Corrections (TGPCs).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.06.03 (CORE) INITIATE/PROCESS CHECK FIRING AND CANCEL CHECK FIRING WITH THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, communications with subscribers, a fire mission(s) in progress, a unit Standing Operating Procedures (SOP), operations order, situation map, the requirement to initiate and cancel check firing, and the references.

STANDARD(S): Per references.

PERFORMANCE STEPS:

1. Initiate check firing upon receipt of any check firing message.
2. Cancel check firing upon receipt of any verified cancel check firing message.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.06.04 (CORE) PROCESS A FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, a situation map, an operations order, a fire plan either in the input queue or on a written document, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Display appropriate message.
2. Edit and enter appropriate information, as directed.
3. Conduct data base recording.
4. Compute, store, and update information, as directed.
5. Process targets as fire commands are received in the input queue.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0844.06.05 (CORE) FIRE A TARGET FROM THE FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a fire plan entered, a data base, a fire mission to fire a target in the fire plan, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Display the appropriate fire plan target.
2. Complete and execute the format.
3. Review and transmit the fire commands.
4. End the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids

TASK: 0844.06.06 (CORE) PROCESS A TIME ON TARGET (TOT) FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, an operations order, a situation map, the requirement to fire a Time On Target (TOT) fire mission, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Display the appropriate message format.
2. Review, edit, and execute the message format.
3. Process the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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ENCLOSURE (3)

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0844.06.07 (CORE) ESTABLISH OR MODIFY THE H-HOUR IN THE FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a fire plan, a data base, an H-hour, and the references.

STANDARD(S): Per the reference, correctly entering the H-hour into the Battery Computer System (BCS).

PERFORMANCE STEPS:

1. Complete the message.
2. Process format.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids

TASK: 0844.06.08 (CORE PLUS) ASSIGN TARGETS TO KNOWN POINT FILE WHEN ALREADY IN TARGET FILE USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a data base, targets already entered in the target file, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select the FM:QF format.
2. Complete and execute the message.
3. Ensure target is stored as a known point.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids

TASK: 0844.06.09 (CORE) PROCESS AN ON-CALL FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, communications with an observer, an operations order, multiple targets in the target/known point file, a received call for fire from the observer on one of the stored targets, a fire order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Review, edit, and execute call for fire message.
2. Transmit related messages (fire commands, message to observer, shot, splash).
3. Process subsequent corrections and end of mission, as required.

- 4. Record data base, as directed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
- 2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.06.10 (CORE) PROCESS A PRIORITY MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, communications with an observer, an operations order, an FPF/Copperhead priority target, a fire order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Establish priority mission based upon the Call For Fire (CFF) and fire order.
- 2. Update firing data.
- 3. Execute priority mission.
- 4. Delete priority target, as directed.
- 5. Record data base, as directed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
- 2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.06.11 (CORE) PROCESS A FIREFINDER FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational BCS with a recorded data base, an FM/CFF, a fire mission generated by a field artillery radar, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Display, complete, and execute the format.
- 2. Transmit the fire commands.
- 3. Complete the mission.
- 4. Process end of mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
- 2. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0844.06.12 (CORE PLUS) PROCESS A QUICK SMOKE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, a smoke call for fire, sufficient information to process a quick smoke mission, a fire order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Display the message format and announce the fire mission information.
2. Enter appropriate information based on fire order.
3. Edit and execute format.
4. Transmit related messages (fire commands, message to observer, shot, splash).
5. Process subsequent corrections and end of mission, as required.
6. Record data base, as directed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
 2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0844.06.13 (CORE PLUS) PROCESS LASER MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, a request from an observer for a mission on a stationary target located with a laser, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Display call for fire message(s).
2. Edit/update call for fire message(s), based on the fire order.
3. Execute the format.
4. Transmit related messages (fire commands, message to observer, shot and splash).
5. Process end of mission.
6. Record data base, as directed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
 2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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DUTY AREA 07 - BACK-UP COMPUTER SYSTEM (BUCS) GENERAL

TASK: 0844.07.01 (CORE PLUS) PREPARE THE BACK-UP COMPUTER SYSTEM (BUCS) FOR OPERATION

CONDITION(S): Given BUCS SPECIAL components and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Set up and prepare BUCS SPECIAL.
- 2. Set up and interface BUCS SPECIAL equipment.
- 3. Perform the computer operational self-test.
- 4. Perform the thinkjet printer operational self-test.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0844.07.02 (CORE PLUS) PERFORM MAINTENANCE ON BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL

CONDITION(S): Given BUCS SPECIAL component, rags, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Perform maintenance on the computer.
- 2. Perform maintenance on the printer.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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DUTY AREA 08 - BACK-UP COMPUTER SYSTEM (BUCS) INITIALIZATION AND DATA BASE

TASK: 0844.08.01 (CORE PLUS) INITIALIZE THE BACK-UP COMPUTER SYSTEM (BUCS) AND CONSTRUCT A DATA BASE

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module, a map, firing unit information, XO's report, MET data, observer information, target/known point information, registration data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Power up and initialize the Back-Up Computer System (BUCS).
- 2. Determine the map information and enter the mapmod.
- 3. Enter the firing unit information and XO's report information.
- 4. Process MET data.
- 5. Enter observer information.
- 6. Enter target/known point information.
- 7. Enter known registration data.
- 8. Perform "BUCS Online" procedures with BCS.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

Annex VI to
Appendix F to
ENCLOSURE (3)

REFERENCE(S):

- 1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application

TASK: 0844.08.02 (CORE PLUS) LOAD AND UPDATE A PREVIOUSLY RECORDED BACK-UP COMPUTER SYSTEM (BUCS) DATA BASE

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with previously recorded data base, current/updated data base information, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Power up the Back-Up Computer System (BUCS).
- 2. Update data base with current data base information.
- 3. Perform "BUCS Online" procedures with BCS.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application

DUTY AREA 09 - BACK-UP COMPUTER SYSTEM (BUCS) FIRE MISSION PROCESSING

TASK: 0844.09.01 (CORE PLUS) PROCESS AN AREA FIRE MISSION USING BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapon-dependent module and a data base entered, a blank record of fire, a Call For Fire (CFF), a fire order, fire order and fire command standards, subsequent corrections, and the reference.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Select the fire mission index menu for area fire.
- 2. Record fire mission information on record of fire.
- 3. Process Call For Fire (CFF) and determine fire commands.
- 4. Announce fire commands.
- 5. Process subsequent corrections, if applicable.
- 6. Repeat STEPS 4 and 5 until processing End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application

DUTY AREA 10 - BACK-UP COMPUTER SYSTEM (BUCS) REGISTRATIONS AND REGISTRATION CORRECTIONS

TASK: 0844.10.01 (CORE PLUS) PROCESS A PRECISION REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with appropriate weapon-dependent module and a data base, a fire order, fire command standards, blank record of fire, the observer OT direction, subsequent corrections, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select the fire mission index for precision registration.
2. Record registration information on the record of fire.
3. Process the impact phase and compute residuals.
4. Process the time phase and compute residuals.
5. Display and store corrections.
6. Process End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0844.10.02 (CORE PLUS) PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI) REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module and a data base entered, a blank record of fire, a fire order, fire command standards, High Burst/Mean Point of Impact (HB/MPI) data, one laser equipped observer or two observers, observer spottings, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select the fire mission index for the High Burst/Mean Point of Impact (HB/MPI) registration.
2. Enter the High Burst/Mean Point of Impact (HB/MPI) registration data and record registration information on the record of fire.
3. Determine and enter probable errors from Tabular Firing Tables (TFT) (Table G).
4. Process the data, announce observer orienting data, and determine fire commands.
5. Enter observer spottings.
6. Announce MBL data and unsatisfactory rounds, if appropriate.
7. Compute corrections and store residuals.
8. Process End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0844.10.03 (CORE PLUS) PROCESS A RADAR REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module and a data base entered, a blank record of fire, a fire order, fire command standards, appropriate Tabular Firing Tables (TFTs), Firefinder radar data, and the reference.

STANDARD(S): Per the reference.

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PERFORMANCE STEPS:

1. Select fire mission index for the radar registration.
2. Enter radar registration data and record registration information on the record of fire.
3. Enter probable errors from Tabular Firing Table (TFT) (Table F) and determine max ord.
4. Process the data, announce observer orienting data, and determine fire commands.
5. Enter observer spottings.
6. Announce MBL data and unsatisfactory rounds, if appropriate.
7. Compute corrections and store residuals.
8. Process End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0844.10.04 (CORE PLUS) PERFORM THE CONCURRENT MET PROCEDURE USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module and a data base, a fire order from a BUCS registration, adjusted (did hit) data from the registration, BUCS residuals from that registration, data from a MET message that was valid at the time of the registration, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select the fire mission index and then display the Back-Up Computer System (BUCS) Residuals format.
2. Enter the information from the Back-Up Computer System (BUCS) registration into the BUCS Residuals format.
3. Record the residuals determined by the Back-Up Computer System (BUCS) and end the mission.
4. Display and review the Registration File.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0844.10.05 (CORE PLUS) UPDATE REGISTRATION CORRECTIONS WITH SURVEY DATA USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module, a data base constructed in the computer having a map spotted orienting station and lay data based on the grid azimuth method, a registration file, previously fired registration data, updated location and lay data provided by survey, BUCS residuals, and the reference.

STANDARD(S): Per the reference.

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PERFORMANCE STEPS:

1. Display the DATA index and the UPDATE FU file.
2. Enter the updated survey information into the appropriate files.
3. Delete, then reenter the weapons' locations.
4. Display the Fire Mission index and then display the Back-Up Computer System (BUCS) Residuals format.
5. Enter the information from the Back-Up Computer System (BUCS) registration into the BUCS Residuals format.
6. Record the residuals determined by the Back-Up Computer System (BUCS) and end the mission.
7. Display and review the Registration file.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application

TASK: 0844.10.06 (CORE PLUS) COMPUTE BATTERY COMPUTER SYSTEM (BCS) TO BUCS RESIDUALS USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module and a data base entered, Battery Computer System (BCS) data to a target or known point, target location information, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select Battery Computer System (BCS) to Back-Up Computer System (BUCS) residuals from the fire mission index.
2. Enter known point information.
3. Enter Battery Computer System (BCS) data.
4. Compute residuals.
5. Store residuals.
6. Process End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application

DUTY AREA 11 - BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL SITUATIONS

TASK: 0844.11.01 (CORE PLUS) PROCESS AN ILLUMINATION MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module, a data base, a fire order, sufficient information to process the fire mission, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Display the target location format.

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ENCLOSURE (3)

2. Complete the target location format.
3. Process a one-gun illumination.
4. Process a two-gun range spread illumination.
5. Process a two-gun lateral spread illumination mission.
6. Process a four-gun range and lateral spread illumination mission.
7. Process the firing data for a coordinated illumination mission.
8. Process the subsequent corrections.
9. Complete the mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
-

TASK: 0844.11.02 (CORE PLUS) PROCESS A SMOKE MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the appropriate weapons-dependent module, a data base, fire order, sufficient information to process the fire mission, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Display the target location format.
2. Complete the target location format.
3. Process the data for a quick smoke mission.
4. Process the data for an immediate smoke mission.
5. Process the subsequent corrections.
6. Process the Fire For Effect (FFE) data.
7. Process End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
-

DUTY AREA 12 - SURVEY

TASK: 0844.12.01 (CORE PLUS) MEASURE DISTANCES WITH THE DISTOMAT DI-3000

CONDITION(S): Given a tripod, T-2E with accessories, DI-3000 with accessories, a forward station with a prism, a recorder, and the references.

STANDARD(S): Per the references, accurately measuring the slope distance to the forward station.

PERFORMANCE STEPS:

1. Setup, level, and plumb the tripod and theodolite.
2. Mount the DI-3000 and attach power cable to the battery and distomat.

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- 3. Turn on the DI-3000.
- 4. Perform a lamp test.
- 5. Enter the barometric pressure and temperature (4th order only).
- 6. Make a pointing on the target with the theodolite.
- 7. Rotate the tangent screws to obtain the highest signal strength.
- 8. Measure the distance to the forward station in both the DIST and DIL modes.
- 9. Announce the distance to the recorder and check the display when the recorder repeats the distance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. DI-3000 User’s Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.02 (CORE PLUS) PERFORM DI-3000 (DISTOMAT)/THEODOLITE PARALLELISM TEST AND ADJUSTMENT

CONDITION(S): Given a T-2E with accessories, a DI-3000 with accessories, a forward station with a prism at least 100 meters from the distomat, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Setup, level, and plumb tripod and theodolite.
- 2. Mount distomat onto the theodolite ensuring it is properly seated and fixed on its mount.
- 3. Make a pointing on the target with the theodolite.
- 4. Turn on the distomat and check the return signal strength.
- 5. If adjustment is necessary, adjust the distomat to the strongest signal strength using the hex key and the two adjusting screws on the rear of the distomat.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Cpl

REFERENCE(S):

- 1. DI-3000 User’s Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.03 (CORE PLUS) MEASURE A HORIZONTAL AND VERTICAL ANGLE WITH A T-2E THEODOLITE

CONDITION(S): Given a tripod, T-2E with accessories, a forward and rear station, a recorder, and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Setup, level, and plumb tripod and theodolite.
2. Measure a horizontal and vertical angle.
3. March order the theodolite and tripod.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. T-2E User's Manual
2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: Instruct the Marine to set up the reflector on the forward station, and to set up and measure the distance with the distomat at the occupied station. Show the Marine the survey stations.

TASK: 0844.12.04 (CORE PLUS) MAKE OBSERVATIONS FOR THE ARTY ASTRO METHOD

CONDITION(S): Given a tripod, T-2E theodolite with accessories, an azimuth mark, an observable celestial body, a recorder, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Setup, level, and plumb tripod.
2. Make necessary measurements for the artillery astro method.
3. March order the theodolite and tripod.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. T-2E User's Manual
2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

TASK: 0844.12.05 (CORE PLUS) PERFORM THEODOLITE TEST AND ADJUSTMENTS

CONDITION(S): Given a T-2E with accessories, a shaded area on firm ground and free of wind, a forward station at least 100 meters form the theodolite, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Perform plate level test and adjust, if necessary.
2. Perform circular bubble test and adjust, if necessary.
3. Perform optical plumb test and adjust, if necessary.
4. Perform horizontal collimation (index error) test and adjust, if necessary.
5. Perform vertical collimation (index error) test and adjust, if necessary.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Cpl

REFERENCE(S):

- 1. T-2E User’s Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: Proper time management must ensure all weapons are provided proper first echelon maintenance.

TASK: 0844.12.06 (CORE PLUS) PERFORM MAINTENANCE ON A T-2E THEODOLITE

CONDITION(S): Given a T-2E with accessories, authorized cleaning agents, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Dry and clean all painted surfaces.
- 2. Using a camel hair brush, ensure all dust, sand, and other abrasives are removed from all glass surfaces.
- 3. Clean all glass surfaces with lens paper.
- 4. Clean all accessories, per the references.
- 5. Ensure the storage case is clean and dry inside before returning the instrument to the case.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Cpl

REFERENCE(S):

- 1. T-2E User’s Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0416, The Marine Corps Publications and Directives System
- 3. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

- 1. Set up: The forward and rear stations should be easily visible and at least 100 meters from the occupied station.
- 2. During the evaluation: The evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder.

TASK: 0844.12.07 (CORE PLUS) RECORD FIELD NOTES FOR A HORIZONTAL AND VERTICAL ANGLE

CONDITION(S): Given an instrument operator, all necessary stations, a straight edge, a pencil, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Measure a horizontal angle.
- 2. Measure a vertical angle.
- 3. Record a horizontal and vertical angle.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.7, TTP's for Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

- 1. Set up: The forward and rear stations should be easily visible and at least 100 meters from the occupied station.
- 2. During the evaluation, the evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder.

TASK: 0844.12.08 (CORE PLUS) RECORD FIELD NOTES FOR ASTRONOMIC OBSERVATIONS

CONDITION(S): Given an instrument operator, an azimuth mark, time accurate to one second, a straight edge, a pencil, a recorder's notebook, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Conduct an astronomic observation.
- 2. Record field notes for astronomic observation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. T-2E User's Manual
- 2. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

- 1. Set up: The azimuth mark should be easily visible and at least 100 meters from the occupied station.
- 2. During the evaluation: the evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder. Observations can be made on the sun or a star.
- 3.Safety: Ensure a prism or solar filter is available for observations on the sun.

TASK: 0844.12.09 (CORE PLUS) RECORD FIELD NOTES FOR THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given a Position and Azimuth Determining System (PADS) in a vehicle, a PADS operator/driver, marked stations, a 1:50000 scale mapsheet, a trig list, a T-2E theodolite with accessories, a straight edge, a pencil, a recorder's notebook and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record for initialization.
2. Record for an update.
3. Record for a two position mark with a plumb bob.
4. Record for a mark with a T-2E theodolite (Auto Reflection).
5. Record for an optical azimuth mark with a T-2E theodolite (Auto reflection).
6. Record for an update with a T-2E theodolite (Auto reflection).
7. Record updated data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

1. Set up: The azimuth mark should be easily visible and at least 100 meters from the occupied station.
2. During the evaluation, the evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder. Observations can be made on the sun or a star.
3. Safety: Ensure a prism or solar filter is available for observations on the sun.

TASK: 0844.12.10 (CORE PLUS) PERFORM COMPUTATIONS OF AZIMUTHS AND DISTANCES FROM COORDINATES

CONDITION(S): Given a survey computer system, proper forms, a trig list with the names of the stations, a check computer, and the references.

STANDARD(S): Per the references, recording accurate data on the appropriate forms.

PERFORMANCE STEPS:

1. Fill out the header information on the forms.
2. Extract the coordinates of the stations from the trig list and record them on the forms.
3. Perform the computations with the survey computer system.
4. Record the answers on the form.
5. Verify the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.7, TTP's for Marine Artillery Survey
2. ST 6-2-30, Field Artillery Survey, Backup Computer System (BUCS), Revision 1

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DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.11 (CORE PLUS) PERFORM CONVERSION AND TRANSFORMATION OF COORDINATES AND AZIMUTH

CONDITION(S): Given a survey computer system, proper forms, a trig list, the names of the stations, a check computer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Fill out the header information on the forms.
- 2. Convert Universal Traverse Mercator (UTM) coordinates to geographic positions.
- 3. Convert geographic positions to Universal Traverse Mercator (UTM) coordinates.
- 4. Compute Universal Traverse Mercator (UTM) zone to zone transformations of UTM coordinates and grid azimuths.
- 5. Verify the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. T-2E User's Manual
- 2. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.12 (CORE PLUS) PERFORM COMPUTATIONS OF UNIVERSAL TRAVERSE MERCATOR (UTM) CONVERGENCE

CONDITION(S): Given a Survey computer system, proper forms, a trig list with the name of the station, a true azimuth, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Fill out the header information on the form.
- 2. Extract the position of the station from the trig list.
- 3. Compute the grid convergence and grid azimuth.
- 4. Verify the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: The evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder.

TASK: 0844.12.13 (CORE PLUS) PERFORM TRIG TRAVERSE COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder’s notebook, proper forms, a check computer, and the references.

STANDARD(S): Per the references, accurately computing a horizontal distance from the trig traverse operations.

PERFORMANCE STEPS:

1. Fill out the header information on the form.
2. Extract the field data from the recorders notebook and enter the data on the forms
3. Compute the mean distances and comparative accuracy.
4. Verify the computations with the check computer

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: The evaluator must ensure that proper procedures are used for announcing readings and that all readings are read back by the recorder.

TASK: 0844.12.14 (CORE PLUS) PERFORM TRAVERSE COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder’s notebook, proper forms, a trig list, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Fill out the header information on the forms.
2. Extract the starting and ending coordinates from the trig list and enter the data on the forms.
3. Extract the field data from the recorder’s notebook and enter the data on the forms.
4. Compute the traverse.
5. Compute closing data.
6. Adjust the traverse (4th Order only).
7. Verify all computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

TASK: 0844.12.15 (CORE PLUS) PERFORM COMPUTATIONS OF ASTRONOMIC OBSERVATIONS

CONDITION(S): Given a survey computer system, a completed field recorder's notebook, proper forms, a trig list, a check computer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Fill out the header information on the forms.
2. Extract positions from the trig list and enter the data on the form.
3. Extract the field data from the recorder's notebook and enter the data on the forms.
4. Extract necessary data from FM-6-300 Army Ephemeris and enter the data on the forms.
5. Compute a grid azimuth using the artillery astro method.
6. Verify all computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. Computer System's User Manual
2. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0844.12.16 (CORE PLUS) PERFORM INTERSECTION COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder's notebook, proper forms, a trig list, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Fill out the header information on the forms.
2. Extract positions from the trig list and enter the data on the form.
3. Extract the field data from the recorder's notebook and enter the data on the forms.
4. Compute the intersection.
5. Verify the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0844.12.17 (CORE PLUS) PERFORM THREE POINT RESECTION COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder's notebook, proper forms, a trig list, a check computer, and the reference.

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STANDARD(S): Per the reference, performing accurate computations of (two) three point resections, each using the same center station.

PERFORMANCE STEPS:

1. Fill out the header information on the forms.
2. Extract positions from the trig list and enter the data on the forms.
3. Extract the field data from the recorder’s notebook and enter data on the forms.
4. Compute the three point resection.
5. Compute closing data.
6. Compute the mean position and elevation.
7. Verify the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0844.12.18 (CORE PLUS) PERFORM DATUM TO DATUM TRANSFORMATION COMPUTATIONS

CONDITION(S): Given a survey computer system, a 1:50,000 scale mapsheet, proper forms, a trig list, a station name from the trig list, datum not used on the mapsheet, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Fill out the header information on the forms.
2. Determine the datum used on the mapsheet.
3. Extract the position of the station from trig list and enter data on forms.
4. Perform a datum to datum transformation from the map datum to the new datum, using the programmed datums.
5. Perform a datum to datum transformation from the map datum, using the new user defined option.
6. Verify all computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0844.12.19 (CORE PLUS) IDENTIFY STARS FOR ASTRONOMIC OBSERVATION

CONDITION(S): Outdoors under a clear night sky, and given FM 6-300, a world star chart, a star finder and identifier, DA Form 4175, geographic coordinates, UTM coordinates, local date and time, time zone, a 1:50,000 scale mapsheet, a survey computer system, and the references.

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STANDARD(S): Per the references, utilizing both DA Form 4175 with the star finder identifier and the survey computer system.

PERFORMANCE STEPS:

1. Determine the availability of the preferred celestial bodies for observations, Polaris (Northern Hemisphere) or Alpha Acrux (Southern Hemisphere).
2. Select and identify stars with the star finder and identifier and DA Form 4175.
 - a. Select/mount a template for the star finder.
 - b. Construct observation windows on the template.
 - c. Determine the orienting angle using DA Form 4175 or FM 6-300.
 - d. Orient the star identifier.
3. Select and identify stars with the star finder and identifier and a survey computer system:
 - a. Select/mount a template for the star identifier.
 - b. Construct observation windows on the template.
 - c. Determine the ellipsoid and grid zone from the mapsheet.
 - d. Determine projected time and date of observation.
 - e. Enter necessary data into the survey computer system to determine the local sidereal time.
 - f. Orient the star finder.
 - g. Select stars to be used for the observations.
 - h. Enter selected star numbers into the survey computer system.
 - i. Identify stars to be used for the observations.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCRP 3-16.1B, Army Ephemeris
2. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

TASK: 0844.12.20 (CORE PLUS) INITIALIZE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given a Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a trig list, a 1:50,000 scale mapsheet, marked survey control stations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Ensure the Position and Azimuth Determining System (PADS) is located within 100 meters of a Survey Control Point (SCP).
2. Perform pre-operation checks and services.
3. Turn on breakers CB1 and CB2; turn on Position and Azimuth Determining System (PADS).

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- 4. Initialize Position and Azimuth Determining System (PADS).
 - a. Extract ellipsoid and grid zone from the mapsheet.
 - b. Extract UTM coordinates and elevation from the trig list.
 - c. Read data to the recorder; verify the data read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.21 (CORE PLUS) UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB OVER A SURVEY CONTROL POINT (SCP)

CONDITION(S): Given an initialized Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a trig list, a 1:50,000 scale mapsheet, marked survey control stations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure Position and Azimuth Determining System (PADS) is plumbed over the Survey Control Point (SCP) with the transmission in neutral and the parking brake applied.
- 2. Update the Position and Azimuth Determining System (PADS).
 - a. Extract UTM grid zone, UTM coordinates, and elevation from the trig list.
 - b. Read data to the recorder; verify the data read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.22 (CORE PLUS) UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE OVER A SURVEY CONTROL POINT (SCP) (AUTOREFLECTION)

CONDITION(S): Given an initialized Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, a trig list, a 1:50,000 scale mapsheet, marked survey control stations, and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Ensure the vehicle is located within 16 meters of the Survey Control Point (SCP).
2. Set up, plumb, and level the theodolite over the Survey Control Point (SCP).
3. Achieve autoreflexion; measure the horizontal distance.
4. Update the Position and Azimuth Determining System (PADS):
 - a. Extract UTM grid zone and UTM coordinates and elevation from the trig list.
 - b. Read data to the recorder; verify the data read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey
2. TM 5-6675-308-12, Operator's and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0844.12.23 (CORE PLUS) UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH PLUMB BOB OVER A STATION LOCATED BY GLOBAL POSITIONING SYSTEM (GPS)

CONDITION(S): Given an initialized Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, an AN/PSN-11 (PLGR), a 1:50,000 scale mapsheet, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the position with the PLGR in accordance with the following specifications:
 - a. Turn PLGR on.
 - b. Verify the PLGR has a valid cryptographic fill.
 - c. Place Setup Mode to CONT.
 - d. Verify Setup: Horizontal datum, Vertical datum, SV-Type All-Y.
 - e. Remain in CONT mode until FOM is 1.
 - f. Change Setup Mode to AVG.
 - g. Use UTM coordinates from PLGR after 300 averages.
2. Ensure Position and Azimuth Determining System (PADS) is plumbed over the station with the transmission in neutral and the parking brakes applied.
3. Update the Position and Azimuth Determining System (PADS).
 - a. Extract UTM grid zone, UTM coordinates, and elevation from the trig list.
 - b. Read data to the recorder; verify the data read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11
- 3. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0844.12.24 (CORE PLUS) PERFORM A TWO POSITION MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, two marked stations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure the Position and Azimuth Determining System (PADS) is plumbed over the station with the transmission in neutral and parking brake applied.
- 2. Mark the station.
- 3. Read data to the recorder; verify the data read back by the recorder prior to moving to the next station.
- 4. Ensure the Position and Azimuth Determining System (PADS) is plumbed over the second station with the transmission in neutral and parking brake applied.
- 5. Mark the station.
- 6. Read data to the recorder; verify the data read back by the recorder.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.25 (CORE PLUS) PERFORM A MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, a marked station, and the references.

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STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure the vehicle is located within 16 meters of the station.
- 2. Set up, plumb, and level the theodolite over the station.
- 3. Achieve autoreflection; measure the horizontal distance.
- 4. Mark the station.
- 5. Read data to the recorder; verify the data read back by the recorder.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.26 (CORE PLUS) PERFORM AN OPTICAL AZIMUTH MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, a marked station, an azimuth mark with a tripod and target set, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure the vehicle is located within 16 meters of the station.
- 2. Set up, plumb, and level the theodolite over the station.
- 3. Achieve autoreflection; measure the horizontal angle and the horizontal distance.
- 4. Mark the station.
- 5. Read the data to the recorder; verify the data read back by the recorder.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.27 (CORE PLUS) EXTRACT ADJUSTED DATA FROM THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the identification numbers of the stations between the last two updates.
2. Display the adjusted UTM Easting and Northing and the elevation of each ID number.
3. Read data to the recorder; verify the data read back by the recorder.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey
2. TM 5-6675-308-12, Operator's and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

TASK: 0844.12.28 (CORE PLUS) PERFORM OPERATOR'S MAINTENANCE ON THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given a Position and Azimuth Determining System (PADS) with accessories mounted in a vehicle, the reference, an assistant operator, and a survey control point.

STANDARD(S): Per the reference, ensuring performance of all required checks and services.

PERFORMANCE STEPS:

1. Perform before-operation checks and services.
2. Perform during-operation check and services.
3. Perform after-operation checks and services.
4. Perform monthly checks and services.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 5-6675-308-12, Operator's and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

1. 0410, MIMMS (AIS)
2. 0416, The Marine Corps Publications and Directives System
3. 0813, Field Artillery Survey

TASK: 0844.12.29 (CORE PLUS) PERFORM CONVERSION TO COMMON CONTROL PROCEDURES

CONDITION(S): Given a completed field recorder's notebook and computations from a battalion traverse, higher echelon coordinates, azimuth, elevation, a survey computer system with a power source, and the references.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine the difference between higher and lower echelon azimuth.

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2. Determine the radial error between higher and lower echelon positions.
3. Determine the difference between higher and lower echelon elevation.
4. Determine the need to convert to common control using the "2, 10, 2" rule.
5. Convert the lower echelon survey data to common control.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0844.12.30 (CORE PLUS) MARK SURVEY STATIONS

CONDITION(S): Given an artillery firing position, a yellow witness stake, a red and yellow witness stake, wooden hubs, a hammer, flagging, survey tags, a survey team, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Emplace wooden hubs at the OS and EOL locations, as positioned by the survey party chief.
2. Witness the Orienting Station (OS) with a yellow witness stake inclined 45 degrees towards the End Of Orienting Line (EOL).
3. Witness the End Of Orienting Line (EOL) with a red and yellow witness stake inclined 45 degrees towards the Orienting Station (OS).
4. Fill out and attach them to the hubs and to the witness stakes.
5. Flag the hubs and witness stakes, as necessary.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S): (NONE)

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0844.12.31 (CORE PLUS) DECLINATE AN M2A2 AIMING CIRCLE

CONDITION(S): Given an M2A2 Aiming Circle with accessories, a declination station, a trig list page for that declination station, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Setup, plumb, and level the M2A2 aiming circle.
2. Set the grid azimuth to azimuth mark 1 on the scale with the recording motion.
3. Sight in on azimuth mark 1 with the non-recording motion.
4. Orient the telescope towards North with the recording motion and unlock the magnetic needle.
5. Center the magnetic needle in the window with the recording motion, and lock the magnetic needle.

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- 6. Record the grid azimuth to magnetic North (grid declination).
- 7. Perform STEPS 2-6 over all azimuth marks listed on the trig list page.
- 8. Mean the grid declinations from each azimuth mark and record the mean.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 9-1290-262-10, Operator’s Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

ADMINISTRATIVE INSTRUCTIONS: Inspect the declination station for visibility to the azimuth marks and perform any necessary clearing prior to performing this evaluation.

TASK: 0844.12.32 (CORE PLUS) DETERMINE A GRID AZIMUTH WITH A DECLINATED M2A2 AIMING CIRCLE

CONDITION(S): Given a declinated M2A2 Aiming Circle with accessories, a marked station, an azimuth mark, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Setup, plumb, and level the M2A2 aiming circle over the station.
- 2. Set the grid declination on the scale with the recording motion.
- 3. Orient the telescope towards North with the non-recording motion and unlock the magnetic needle.
- 4. Center the magnetic needle in the window with the non-recording motion, and lock the magnetic needle.
- 5. Sight on the azimuth mark with the recording motion.
- 6. Record the grid azimuth.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. TM 9-1290-262-10, Operator’s Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

TASK: 0844.12.33 (CORE PLUS) PERFORM CRATER ANALYSIS WITH AN M2A2 AIMING CIRCLE

CONDITION(S): Given a declinated M2A2 Aiming Circle with accessories, an AN/PSN-11 (PLGR), a crater, string, hubs, a hammer, and the references.

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STANDARD(S): Per the references, accurately determining the position of the crater and the grid azimuth to the firing unit.

PERFORMANCE STEPS:

1. Perform crater analysis using the following methods:
 - a. Fuze Furrow and Center of Crater method.
 - b. Side Spray method.
 - c. Ricochet Furrow method.
 - d. Main Axis method.
 - e. Splinter Groove method.
 - f. Fuze Tunnel method.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Cpl

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCWP 3-16.3, Field Artillery Cannon Battery
3. TM 9-1290-262-10, Operator's Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
 2. 0813, Field Artillery Survey
-

TASK: 0844.12.34 (CORE PLUS) PERFORM SHELL FRAGMENT ANALYSIS

CONDITION(S): Given a curvature template, a boxwood scale, tags, a crater analysis report, a crater containing fragments, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Collect usable shell fragments.
 - a. Determine type of shell (mortar, artillery, rocket).
 - b. (Low order burst or Dud) Determine caliber of shell using a curvature template.
 - c. (High order burst) Carefully search for fragments of the fins, rotating band, gas check bands, fuzes, or large sections of the body. Determine caliber of shell using a curvature template and the references.
2. Tag usable fragments. Tags must include location of the crater, direction to the firing unit, and date-time group of shelling.
3. Complete the crater analysis report.
4. Send the crater analysis report and tagged fragments to the S-2 via proper channels.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Cpl

REFERENCE(S):

1. Defense Intelligence Agency (DIA) Projectile Fragmentation Identification Guide

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- MCO 3501.26A
11 Apr 00
2. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition

3. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
-

TASK: 0844.12.35 (CORE PLUS) PERFORM OPERATOR’S MAINTENANCE ON AN M2A2 AIMING CIRCLE

CONDITION(S): Given an M2A2 Aiming Circle with accessories, BA-30 batteries, authorized cleaning materials, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Perform operator’s checks and services:

a. Perform micrometer knob adjustments, as necessary.

b. Perform level vial check.

c. Perform magnetic needle check.

d. Perform tilted reticle check.

e. Perform a vertical angle check.
2. Wipe all metal surfaces with a dry clean cloth.
3. Clean all glass with a camel hair brush and lens paper.
4. Check night lighting equipment for operability.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. TM 9-1290-262-10, Operator’s Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

1. 0410, MIMMS (AIS)
2. 0416, The Marine Corps Publications and Directives System
3. 0813, Field Artillery Survey
-

TASK: 0844.12.36 (CORE PLUS) CONDUCT AN ADJUST FIRE MISSION

CONDITION(S): Given a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with a Fire Direction Center (FDC), pencil, paper, and the references.

STANDARD(S): Per the references, completing a call for fire within 60 seconds of target identification; announcing subsequent corrections within 15 seconds of round burst; expressing deviation to 10 meters, range to 100 meters, and Height of Burst (HOB) corrections to 5 meters; and entering the Fire for Effect (FFE) stage when burst is within 50 meters of the target.

PERFORMANCE STEPS:

1. Determine target location using grid method, polar plot, or shift method.
2. Transmit the Call For Fire (CFF).

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- 3. Transmit Observer Target (OT) direction with or before the first correction if the target is located using the grid method.
- 4. Transmit subsequent corrections.
- 5. Request Fire For Effect (FFE).
- 6. Transmit refinement data (if any), Record as Target, End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: LCpl

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	10.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	10.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	10.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	10.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

ADMINISTRATIVE INSTRUCTIONS: If probable error in range is greater than 38 meters, the observer may enter the FFE stage when a 200 meter bracket is split.

TASK: 0844.12.37 (CORE PLUS) CONDUCT AN IMMEDIATE SUPPRESSION MISSION

CONDITION(S): Given a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with a Fire Direction Center (FDC), pencil, and paper.

STANDARD(S): Per the references, correctly transmitting a Call For Fire (CFF) within 30 seconds of target identification and ensuring initial target location is within 300 meters of the actual location.

PERFORMANCE STEPS:

- 1. Determine target location using grid method, polar plot method, or shift method.
- 2. Transmit the Call For Fire (CFF).
- 3. Transmit subsequent corrections within 15 seconds of round impact, if necessary.
- 4. Transmit refinement data (if any), Record as Target, End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: LCpl

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155 M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	8.000 EA
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	8.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D or N464 VT M732 or N463 VT M728.	4.000 EA	4.000 EA	8.000 EA
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	8.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0844.12.38 (CORE PLUS) UPDATE THE EMPHEMERIS FILE IN GP SURVEY

CONDITION(S): Given a 4000 MSGR receiver, Compact L1/L2 antenna, a computer with Trimble software (GPS Survey), Field Support Module, necessary cabling, and the reference.

STANDARD(S): Per the reference, successfully downloading the ephemeris file.

PERFORMANCE STEPS:

- 1. Setup receiver, antenna, and log data.
- 2. March order receiver/antenna.
- 3. Download raw ephemeris data to computer and ensure the ephemeris file is stored as "current.eph" in the BIN directory.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.39 (CORE PLUS) PRINT GLOBAL POSITIONING SYSTEM (GPS) OBSERVATION WINDOWS USING PLANNING SOFTWARE

CONDITION(S): Given a PC with a current ephemeris and GP-Survey software and the reference.

STANDARD(S): Per the reference, ensuring satellite availability and PDOP graphs are printed.

PERFORMANCE STEPS:

- 1. Open GP-Survey software.
- 2. Select "Plan or Quick Plan", establish date and area of observation.
- 3. Select the types of view graphs to view.
- 4. View/print observation times and graphs.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
-

TASK: 0844.12.40 (CORE PLUS) ESTABLISH AN ABSOLUTE POINT

CONDITION(S): Given an operating area, a survey order, an MSGR receiver/antenna w/accessories, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Setup and level Geodetic L1/L2 antenna.
- 2. Connect antenna to MSGR receiver.
- 3. Verify power cable connection with the MSGR receiver.
- 4. Power up the MSGR receiver.
- 5. Establish the absolute position in accordance with the specifications of the survey order.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
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TASK: 0844.12.41 (CORE PLUS) PERFORM A REAL TIME KINEMATIC-ON THE FLY (RTK/OTF) SURVEY

CONDITION(S): Given an operating area, a survey order, MSGR receivers/antennas w/accessories, SINCGARS radios and vehicles, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify antenna, radio, battery, and TDC2M connections.
- 2. Power up MSGR receiver and TDC2M.
- 3. Verify TDC2M configuration.
- 4. Verify signal reception.
- 5. Establish RTK/OTF reference station.
- 6. Establish an RTK/OTF rover station.
- 7. Establish position and target area positions.
- 8. Perform calibration operations over the RTK/OTF network.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.42 (CORE PLUS) PERFORM DATUM TRANSFORMATIONS WITH THE TDC2M

CONDITION(S): Given a TDC2M with a survey file, a map of the operational area, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Open the job file in the TDC2M.
- 2. Extract transformation data from the surveyed datum to another datum.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.43 (CORE PLUS) PERFORM A FAST STATIC, STATIC, AND KINEMATIC SURVEY

CONDITION(S): Given a survey order, an MSGR receiver with antenna and accessories, a vehicle and communications assets, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Locate station to be surveyed.
- 2. Setup, plumb, and level the antenna.
- 3. Begin session in accordance with times listed in the survey order.
- 4. End session in accordance with the survey order.
- 5. March order the equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.44 (CORE PLUS) POST PROCESSED DATA FROM A FAST STATIC, STATIC, AND KINEMATIC NETWORK SURVEY

CONDITION(S): Given a 4000 MSGR, Field Support Module, a PC configured with current Trimble software, access to appropriate survey data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Download raw GPS data from the MSGR.

- 2. Perform check-in procedures of the raw Global Positioning System (GPS) data.
- 3. View network map.
- 4. View and print post-processed data logs.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
-

TASK: 0844.12.45 (CORE PLUS) ADJUST A FAST STATIC, STATIC, AND KINEMATIC SURVEY NETWORK

CONDITION(S): Given a PC, a post-processed Fast Static Survey, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Enter Global Positioning System (GPS) adjustment software.
- 2. Apply a Geoid Model to the adjustment.
- 3. Perform a minimally constrained adjustment.
- 4. Perform a constrained adjustment.
- 5. Print reports.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
-

TASK: 0844.12.46 (CORE PLUS) DETERMINE USER DEFINED DATA AND ELLIPSOID DATUM

CONDITION(S): Given a 1:50,000 scale map sheet, a list of organic fire support systems requiring ellipsoid/datum input, a list of survey assets requiring ellipsoid/datum input, and the reference.

STANDARD(S): Per the reference, accurately determining ellipsoid and datum transformation parameters for each organic fire support/survey system.

PERFORMANCE STEPS:

- 1. Determine the referenced ellipsoid and horizontal datum to a mapsheet of the area of operations.
- 2. Determine the semi-major, semi-minor axis, flattening, and the inverse of flattening of the ellipsoid.
- 3. Provide the appropriate ellipsoid/datum transformation parameters, in the required format, to the user.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0844.12.47 (CORE PLUS) CONDUCT RECONNAISSANCE FOR ARTILLERY UNITS

CONDITION(S): Given a brief by the S-3 and/or Battalion Survey Officer/Chief to perform position area reconnaissance and/or route reconnaissance during combat operations.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Receive friendly and enemy situation brief.
- 2. Receive reconnaissance order.
- 3. Prepare survey equipment and materiel to extend survey and emplace appropriate markers in positions suitable for occupation.
- 4. Conduct route reconnaissance.
- 5. Conduct position reconnaissance of areas specified in the reconnaissance order.
- 6. Visualize gun positioning to minimize site-to-crest / terrain masking as much as practicable.
- 7. Emplace survey markers, measure the average site-to-crest, and record it.
- 8. Conduct reconnaissance for supplementary and alternate positions as time permits.
- 9. Report any significant findings / deviations by the most direct means.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-20-1 (HTF), Field Artillery Cannon Battalion
- 2. MCWP 3-16.1, Marine Artillery Support
- 3. MCWP 3-16.7, TTP’s for Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
- 2. 0332, Reconnaissance Marine
- 3. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare

DUTY AREA 13 - FIRING CHARTS

TASK: 0844.13.01 (CORE) CONSTRUCT A SURVEYED FIRING CHART

CONDITION(S): Given a grid sheet, plotting board, lower left-hand corner coordinates, a range deflection protractor (labeled for deflection and azimuth), an aluminum plotting scale, plotting pins, red, blue, green, 6H and 4H pencils, an art gum eraser, grid coordinates for a designated adjusting piece, the azimuth of lay and referred deflection for the firing unit, grid coordinates for a known point, observer, radar, a planned target, a target located by firing, and the reference.

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STANDARD(S): Per the reference, ensuring chart includes primary and supplementary indexes, positions plotted within +/- 30 meters, and azimuth indexes plotted within +/- 3 mils.

PERFORMANCE STEPS:

1. Number the grid lines for Easting and Northing.
2. Plot, construct, and label tick marks for all locations.
3. Construct North indices for known points.
4. Construct and label the azimuth indices for observation posts and radar locations.
5. Construct and label primary and supplemental deflection indices for the firing unit.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0844.13.02 (CORE) PLOT TARGETS AND DETERMINE AND ANNOUNCE CHART DATA

CONDITION(S): Given a prepared firing chart, three observer calls for fire (locating a target by grid coordinates, shift from a known point, and polar coordinates), observer OT direction and subsequent corrections, plotting equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Plot the target location.
2. Determine and announce chart range.
3. Determine and announce chart deflection.
4. Orient target grid.
5. Determine and announce Angle T.
6. Plot observer's subsequent corrections and determine chart data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0844.13.03 (CORE PLUS) CONSTRUCT AN EMERGENCY FIRING CHART

CONDITION(S): Given the referred deflection, the range to the target/center of sector, the azimuth to the target/center of sector, the observer's Observer Target (OT) target direction, subsequent observer corrections, a surface suitable for plotting that can accommodate a Range-Deflection Protractor (RDP), plotting equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Establish the battery center using the Range-Deflection Protractor (RDP).
2. Polar plot the target/center of sector.
3. Plot the observer's subsequent corrections and determine and announce range and deflection.

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- Construct and label a tick mark at the final adjusted location.
- Construct and label a tick mark at the battery location.
- Construct and label a permanent North index for the final adjusted location.
- Construct a deflection index for the battery.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 14 - MANUAL SITE

TASK: 0844.14.01 (CORE) DETERMINE VERTICAL INTERVAL AND COMPUTE AND ANNOUNCE ANGLE OF SITE, SITE, AND VERTICAL ANGLE

CONDITION(S): Given the altitude of the battery, a target, the chart range to the target, observer alt, observer distance to the target, the charge to be fired, appropriate Tabular Firing Tables (TFT), GST, pencil and paper, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- Determine the vertical interval.
- Compute and announce the angle of site.
- Compute and announce site.
- Compute and announce the vertical angle.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 15 - MANUAL FIRE MISSION PROCESSING

TASK: 0844.15.01 (CORE) APPLY VALUES FROM TABULAR FIRING TABLES (TFTS) ADDENDUMS

CONDITION(S): Given a Tabular Firing Table (TFT) with all existing addendums, an entry argument, the requirement to apply and use the values, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- Select the appropriate Tabular Firing Tables (TFT) or addendum.
- Enter the appropriate table.
- Enter the appropriate column.
- Extract the data.
- Explain how the data is used.
- Apply the data to the required situation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

Annex VI to
Appendix F to
ENCLOSURE (3)

REFERENCE(S):

- 1. TFT's and Addendums
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.15.02 (CORE) DETERMINE LOW ANGLE FIRING DATA USING THE GRAPHICAL FIRING TABLE (GFT) WITH OR WITHOUT A GFT SETTING APPLIED

CONDITION(S): Given a charge to fire, a chart range and chart deflection to the target, a complete set of Graphical Firing Tables (GFTs) (with or without a GFT setting applied), and the reference.

STANDARD(S): Per the reference, accurately determining firing data for a High Explosive (HE) projectile to within +/- 1 mil in elevation, +/- .1 fuze setting increments, and 0 mils in deflection.

PERFORMANCE STEPS:

- 1. Select the appropriate Graphical Firing Table (GFT) and charge.
- 2. Determine fuze setting, if applicable.
- 3. Determine deflection.
- 4. Determine elevation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.15.03 (CORE) DETERMINE AND RECORD FIRING DATA AND ANNOUNCE FIRE COMMANDS

CONDITION(S): Given a blank record of fire, fire command and fire order standards, a call for fire, a fire order, message to observer, chart range and deflection for the initial target location, subsequent corrections, chart ranges and deflections from subsequent corrections, site, Graphical Firing Table (GFT) (with or without a GFT setting applied), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Record Call For Fire (CFF) and alert firing element.
- 2. Record fire order and message to observer.
- 3. Record chart data.
- 4. Determine, record, and announce fire commands.
- 5. Record mission related data.
- 6. Record subsequent corrections.
- 7. Repeat STEPS 3 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

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TASK: 0844.15.04 (CORE) PROCESS A LOW ANGLE FIRE MISSION FOR SHELL HIGH EXPLOSIVE (HE)

CONDITION(S): Given a blank record of fire, a fire mission with shell High Explosive (HE), a fire order, the chart range and deflection, site and shell HE, lot A/G, fuze quick as fire command standards, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record the Call For Fire (CFF) and alert the firing element.
2. Record the fire order and MTO.
3. Record chart data.
4. Determine, record, and announce fire commands.
5. Record mission related data.
6. Repeat STEPS 3 through 5 until End Of Mission (EOM).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.15.05 (CORE) PROCESS A LOW ANGLE FIRE MISSION FOR A NON-STANDARD WEIGHT PROJECTILE/WP

CONDITION(S): Given a blank Record Of Fire (ROF), fire command and fire order standards, a call for fire, a fire order, message to observer, Graphical Firing Table (GFT) with or without GFT setting, chart range and deflection to the initial target location, site, subsequent corrections, chart ranges and deflections for subsequent corrections, ammunition information, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record Call For Fire (CFF) and alert firing element.
2. Record fire order and MTO.
3. Record chart data.
4. Determine, record, and announce fire commands.
5. Record mission related data.
6. Record subsequent corrections.
7. Repeat STEPS 3 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.15.06 (CORE) DETERMINE HIGH ANGLE FIRING DATA (Q & VT)

CONDITION(S): Given a blank Record Of Fire (ROF), fire command and fire order standards, a Call For Fire (CFF), a fire order, a message to observer, a Tabular Firing Tables (TFT) or high angle Graphical Firing Table (GFT) (with or without a GFT setting), chart range and deflection to the initial target location, angle of site, subsequent corrections, chart ranges and deflections from subsequent corrections, and the reference.

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STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record the Call For Fire (CFF).
2. Record the fire order and MTO.
3. Record initial chart data.
4. Determine, record, and announce fire commands.
5. Record mission related data.
6. Record subsequent corrections and chart data.
7. Repeat STEPS 4 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.15.07 (CORE PLUS) PROCESS A LOW ANGLE ILLUMINATION FIRE MISSION (1 GUN, 2 GUN RANGE AND LATERAL SPREAD, COORDINATED ILLUMINATION) (TABULAR FIRING TABLES (TFT)/GRAPHICAL FIRING TABLE (GFT))

CONDITION(S): Given a blank Record Of Fire (ROF), fire command and fire order standards, a Call For Fire (CFF), a fire order, a message to observer, illumination Graphical Firing Table (GFT), Tabular Firing Table (TFT), High Explosive Graphical Firing Table (HE GFT) with GFT setting applied, stop watch, chart range and deflection to the initial target location, firing element and target altitude, subsequent corrections, chart ranges and deflections for subsequent corrections, and the reference.

STANDARD(S): Per the reference and within +/- .2 fuze setting increments, 0 mils in deflection and +/- 2 mils quadrant.

PERFORMANCE STEPS:

1. Record the Call For Fire (CFF).
2. Record the fire order and MTO.
3. Record initial chart data.
4. Determine, record, and announce fire commands.
5. Record mission related data.
6. Record subsequent corrections and chart data.
7. Repeat STEPS 4 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.15.08 (CORE PLUS) PROCESS A HIGH ANGLE ILLUMINATION MISSION USING A TABULAR FIRING TABLE (TFT)

CONDITION(S): Given chart data (range and deflection) to the point to be illuminated, target altitude and Battery altitude, fire order, a 155mm AM-2 Tabular Firing Table (TFT), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record the Call For Fire (CFF).
2. Record the fire order and MTO.
3. Record initial chart data.
4. Determine, record, and announce fire commands.
5. Record mission related data.
6. Record subsequent corrections and chart data.
7. Repeat STEPS 4 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.15.09 (CORE PLUS) PROCESS A FIRE MISSION FOR IMMEDIATE SUPPRESSION/SMOKE

CONDITION(S): Given a blank Record Of Fire (ROF), Call For Fire (CFF), fire order, chart range and deflection, a Graphical Firing Table (GFT) with or without GFT setting applied, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Record the Call For Fire (CFF).
2. Record the fire order and MTO.
3. Record initial chart data.
4. Determine, record, and announce fire commands.
5. Record mission related data.
6. Record subsequent corrections and chart data.
7. Repeat STEPS 4 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.15.10 (CORE) PROCESS A FIRE MISSION FOR SHELL DPICM

CONDITION(S): Given a blank Record Of Fire (ROF), fire command and fire order standards, a Call For Fire (CFF), a fire order, a message to observer, High Explosive Graphical Firing Table (HE GFT) with GFT setting applied, chart range and deflection to the initial target location, subsequent corrections, chart ranges and deflections for subsequent corrections, and the reference.

STANDARD(S): Per the reference and within +/- .1 fuze setting increments, 0 mils in deflection and +/- 1 mil in quadrant.

PERFORMANCE STEPS:

1. Record Call For Fire (CFF) and alert firing element.
2. Record fire order and MTO.

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3. Record initial chart data.
4. Determine the High Explosive (HE) Quadrant Elevation, Fuze Setting, and chart deflection.
5. Determine the DPICM quadrant elevation, fuze setting, and chart deflection.
6. Announce fire commands.
7. Record mission related data.
8. Complete mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.15.11 (CORE) COMPOSE AND RECORD THE MESSAGE TO OBSERVER

CONDITION(S): Given DA Form 4504 (Record Of Fire), fire order standards, a fire order (with or without a Call For Fire (CFF), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Record Call For Fire, if applicable.
2. Record fire order.
3. Compose and record MTO.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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DUTY AREA 16 - MANUAL REGISTRATIONS

TASK: 0844.16.01 (CORE) PROCESS A PRECISION REGISTRATION AND DETERMINE A GRAPHICAL FIRING TABLE (GFT) SETTING AND TOTAL CORRECTIONS

CONDITION(S): Given a fire order, Record Of Fire (ROF), message to observer, appropriate Graphical Firing Table (GFT), Tabular Firing Table (TFT), initial and subsequent chart data, initial and subsequent observer corrections, site, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine and announce initial fire commands for impact phase.
2. Determine and announce subsequent fire commands for impact phase.
3. Determine adjusted elevation and adjusted deflection.
4. Determine and announce initial fire commands for time phase.
5. Determine and announce subsequent fire commands for time phase.
6. Determine adjusted fuze setting.
7. Construct Graphical Firing Table (GFT) setting and determine total corrections.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

ADMINISTRATIVE INSTRUCTIONS: To include all forms of abbreviated registrations.

TASK: 0844.16.02 (CORE) CONSTRUCT A GRAPHICAL FIRING TABLE (GFT) SETTING AND APPLY TOTAL CORRECTIONS FROM A REGISTRATION

CONDITION(S): Given a Record Of Fire (ROF) from a registration with a Graphical Firing Table (GFT) setting constructed on the Record Of Fire (ROF), a Graphical Firing Table (GFT), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Construct the elevation gauge line.
- 2. Construct the time gauge line.
- 3. Apply total and Graphical Firing Table (GFT) deflection corrections.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.16.03 (CORE PLUS) PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI) REGISTRATION

CONDITION(S): Given a blank Record Of Fire (ROF), High Burst/Mean Point of Impact (HB/MPI) form, a Graphical Firing Table (GFT), a Tabular Firing Table (TFT), a GST, a chart with appropriate plotting equipment, observer locations, a situation map, a fire order, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine data to orient the observers.
- 2. Determine and record initial firing data and fire commands.
- 3. Process the High Burst (HB) or Mean Point of Impact (MPI) registration.
- 4. Determine adjusted data.
- 5. Determine the Mean Burst Location (MBL) by graphic resection.
- 6. Determine chart data.
- 7. Determine Graphical Firing Table (GFT) setting and total corrections.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

ADMINISTRATIVE INSTRUCTIONS: Include all forms of abbreviated registrations.

TASK: 0844.16.04 (CORE PLUS) DETERMINE TRANSFER LIMITS AND DETERMINE A GRAPHICAL FIRING TABLE (GFT) SETTING AND DEFLECTION CORRECTIONS

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CONDITION(S): Given a blank Record Of Fire (ROF), a Graphical Firing Table (GFT), a Tabular Firing Table (TFT), a Graphical Firing Table (GFT) setting, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine transfer limits.
2. Compute new Graphical Firing Table (GFT) settings.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.16.05 (CORE PLUS) DETERMINE TOTAL CORRECTIONS AND CONSTRUCT A GRAPHICAL FIRING TABLE (GFT) SETTING FROM A DPICM-SR REGISTRATION

CONDITION(S): Given a completed DPICM-SR registration, a Graphical Firing Table (GFT), a Tabular Firing Table (TFT), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine total corrections.
2. Determine and construct the Graphical Firing Table (GFT) setting.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.16.06 (CORE PLUS) UPDATE A GRAPHICAL FIRING TABLE (GFT) SETTING WHEN TRANSFERRING FROM A MAP SPOT OR OBSERVED FIRING CHART

CONDITION(S): Given a firing chart with plotting equipment, a Graphical Firing Table (GFT), a GST, a map-spotted Graphical Firing Table (GFT) setting, survey data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine the new chart range.
2. Recompute site.
3. Determine the new adjusted elevation and time.
4. Determine the new total and Graphical Firing Table (GFT) deflection corrections.
5. Construct the new Graphical Firing Table (GFT) setting.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.16.07 (CORE PLUS) PROCESS A RADAR REGISTRATION

CONDITION(S): Given a Record Of Fire (ROF), High Burst/Mean Point of Impact (HB/MPI) form, chart with plotting equipment, fire order, radar location, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record the fire order.
2. Determine data to orient the radar.
3. Determine and record firing data and fire commands.
4. Process the radar registration.
5. Determine the mean burst location.
6. Determine chart data and adjusted data.
7. Determine Graphical Firing Table (GFT) setting and total corrections.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.16.08 (CORE PLUS) PROCESS A SECOND LOT REGISTRATION

CONDITION(S): Given a partially completed Record Of Fire (ROF) from the first lot registration, a Tabular Firing Tables (TFT), a Graphical Firing Table (GFT), a fire order, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine and record firing data and fire commands based upon adjusted data from the first lot registration.
2. Process the second lot registration.
3. Determine the adjusted fuze setting.
4. Determine the GFT setting and total corrections from the second lot registration.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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DUTY AREA 17 - VALIDATE METEOROLOGICAL MESSAGE

TASK: 0844.17.01 (CORE PLUS) VERIFY METEOROLOGICAL (MET) MESSAGES

CONDITION(S): Given DA Form 3677 (Computer MET Message), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record a MET message.
2. Determine the validity of the MET message.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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DUTY AREA 18 - MUZZLE VELOCITY

TASK: 0844.18.01 (CORE PLUS) VERIFY THE M94 VELOCIMETER DATA

CONDITION(S): Given M94 velocimeter data, supervision by the Fire Direction Officer (FDO) or Ops Chief, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the entries on the readout for completeness and proper procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.18.02 (CORE PLUS) RECORD THE HISTORICAL MUZZLE VELOCITY (FIRST LOT CALIBRATION) AND INFER A SECOND LOT CALIBRATION USING THE MUZZLE VELOCITY RECORD (DA FORM 4982-R)

CONDITION(S): Given DA Form 4982-R, known data, first lot calibrated muzzle velocities for all the howitzers in the unit, a calibrated muzzle velocity for one howitzer with the second propellant lot, supervision by the Fire Direction Officer (FDO) or Ops Chief, and the reference.

STANDARD(S): Per the reference, accurately determining the first lot MVVs to 0.1 m/s and inferring second lot MVVs and Muzzle Velocities (MVs) to the nearest 0.1 m/s.

PERFORMANCE STEPS:

- 1. Record the first lot known data and determine first lot Muzzle Velocity Variances (MVVs).
- 2. Record the second lot known data and determine the change in Muzzle Velocity Variances (MVVs) between the first and second lot calibrated muzzle velocities from the howitzer calibrating the second lot.
- 3. Determine inferred second lot Muzzle Velocity Variances (MVVs) and Muzzle Velocities (MVs) for all of the howitzers in the unit.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.18.03 (CORE PLUS) DETERMINE MUZZLE VELOCITY VARIANCES (MVVS) BASED ON SHOOTING STRENGTH AND PROPELLANT EFFICIENCIES

CONDITION(S): Given weapon data (Pullover reading and computed Effective Full Charge (EFCs)) for each howitzer in the battery and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Obtain pullover gage reading or computed Effective Full Charge (EFC).
- 2. Determine howitzer shooting strength.
- 3. Obtain propellant lot efficiencies.
- 4. Compute Muzzle Velocity Variances (MVVs).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 09814A-14&P, M94 Muzzle Velocity System
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 19 - MANUAL SPECIAL SITUATIONS

TASK: 0844.19.01 (CORE PLUS) PROCESS A QUICK SMOKE MISSION

CONDITION(S): Given a Record Of Fire (ROF), fire command and fire order standards, a Call For Fire (CFF), a fire order, a message to observer, Graphical Firing Table (GFT) with GFT setting applied, chart range and deflection to the initial target location, site, subsequent corrections, chart ranges and deflections from subsequent corrections, and the reference.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Record the Call For Fire (CFF) and alert firing element.
- 2. Record the fire order and Message To Observer (MTO).
- 3. Record initial chart data.
- 4. Determine, record, and announce fire commands.
- 5. Record mission related data.
- 6. Record subsequent corrections and chart data.
- 7. Repeat STEPS 4 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.19.02 (CORE PLUS) PROCESS A FIRE MISSION FOR SHELL ROCKET ASSISTED PROJECTILE (RAP)

CONDITION(S): Given a Record Of Fire (ROF), a Call For Fire (CFF), fire order, message to observer, chart range and deflection, site, a Graphical Firing Table (GFT) with GFT setting applied, a Tabular Firing Table (TFT), fire command standards, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Record the Call For Fire (CFF) and alert firing element.
- 2. Record the fire order and Message To Observer (MTO).
- 3. Record initial chart data.
- 4. Determine, record, and announce fire commands.
- 5. Record mission related data.
- 6. Record subsequent corrections and chart data.
- 7. Repeat STEPS 4 through 6 until End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

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REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.19.03 (CORE PLUS) PROCESS A LASER FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), a laser fire mission, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine initial data.
- 2. Determine corrections.
- 3. Determine Fire For Effect (FFE) data.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.19.04 (CORE PLUS) PROCESS A RADAR ADJUST FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), a radar adjust fire mission, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine initial data.
- 2. Determine corrections.
- 3. Determine Fire For Effect (FFE) data.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.19.05 (CORE PLUS) PROCESS A DESTRUCTION MISSION

CONDITION(S): Given a Call For Fire (CFF) for a destruction mission and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine initial fire commands.
- 2. Determine subsequent corrections.
- 3. Determine Fire For Effect (FFE) data.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0844.19.06 (CORE PLUS) PROCESS A SWEEP AND ZONE FIRE MISSION

CONDITION(S): Given a Record Of Fire (ROF), fire command and fire order standards, a Call For Fire (CFF) including the dimensions of the target and attitude, a fire order, appropriate Graphical Firing Table (GFT), Tabular Firing Table (TFT), chart range and deflection, site, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Record fire order and alert firing element.
2. Record initial chart data.
3. Determine the number of deflections to fire.
4. Determine the number of mils for each deflection sweep.
5. Determine the number of quadrants to fire.
6. Determine the number of mils for each quadrant zone.
7. Determine, record, and announce fire commands.
8. Record mission related data and determine ammunition expenditure.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.19.07 (CORE PLUS) PROCESS AN AERIAL OBSERVER MISSION (RANGING ROUNDS)

CONDITION(S): Given a Call For Fire (CFF) from an aerial observer and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine target location.
2. Determine location for ranging rounds.
3. Determine firing data.
4. Determine subsequent corrections.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.19.08 (CORE PLUS) REPLOT TARGETS AND DETERMINE REPLOT DATA (FZ QUICK AND VT)

CONDITION(S): Given the deflection, the Quadrant Elevation (QE) and total site fired, a Graphical Firing Table (GFT) with a GFT setting applied, the successive site determined by the Vertical Chart Operator (VCO), the target number, and the reference.

STANDARD(S): Per the reference, announcing the initial replot range within 10 meters, the replot deflection to +/- 0 mils, and the final replot target data.

PERFORMANCE STEPS:

1. Determine the replot deflection.
2. Determine the replot grid and altitude.

3. Determine the replot grid and altitude using fuze VT.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0844.19.09 (CORE PLUS) DETERMINE AND ANNOUNCE REFINEMENT DATA FOR FUZE TIME

CONDITION(S): Given the observer's refinement data, the deflection, the fuze setting, the Quadrant Elevation (QE) fired, a Graphical Firing Table (GFT) with GFT setting, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine refinement data (Fuze Time) with HOB correction.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0844.19.10 (CORE PLUS) MAINTAIN FIRE COMMANDS FOR PREPLANNED/PRIORITY TARGETS

CONDITION(S): Given a Call For Fire (CFF) for a preplanned/priority target and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Announce fire commands for the appropriate target to the gun line.
2. Update fire commands.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Cpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

DUTY AREA 20 - MANUAL FIRE PLANNING

TASK: 0844.20.01 (CORE PLUS) MAINTAIN A TACTICAL SITUATION MAP

CONDITION(S): Given a mounted map covered with acetate overlays, plotting equipment, grease pencils, a range fan, a list of current tactical information, and the reference.

STANDARD(S): Per the reference, accurately plotting and labeling all current information.

PERFORMANCE STEPS:

1. Plot boundaries, maneuver control points, and other maneuver control measures.
2. Plot locations of all friendly units, including target acquisition assets.
3. Plot all fire support coordination measures.
4. Plot targets.
5. Plot enemy units.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols

TASK: 0844.20.02 (CORE PLUS) PROCESS FORWARD OBSERVER’S (FO) LISTS OF TARGETS

CONDITION(S): Given a Fire Direction Center (FDC) with all equipment, Forward Observer’s (FO) lists of targets (the FO does not have communications with the Artillery Liaison Officer at the Fire Support Coordination Center (FSCC)), blank target list work sheets, a pencil, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Record the Forward Observer’s (FO) lists of targets.
- 2. Display the targets on an overlay.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)

TASK: 0844.20.03 (CORE PLUS) UPDATE A TARGET LIST

CONDITION(S): Given a target list, a Target Bulletin (TARBUL), and the references.

STANDARD(S): Per the references, accurately reflecting all changes.

PERFORMANCE STEPS:

- 1. Note additions, deletions, cancellations, changes, and updates to target list.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
- 2. MCWP 3-42.1, Fire Support in MAGTF Operations

TASK: 0844.20.04 (CORE PLUS) PROCESS A FIRE PLAN

CONDITION(S): Given a fire plan, DA Form 5368-R (Quick Fire Plan Form), or a Target List Worksheet/Scheduling Worksheet, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Record the fire plan.
- 2. Compute firing data.
- 3. Execute the fire plan.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)

TASK: 0844.20.05 (CORE PLUS) MAINTAIN A FIRE DIRECTION CENTER (FDC) JOURNAL

CONDITION(S): Given a Fire Direction Center (FDC) journal, unit Standing Operating Procedures (SOP), a pencil, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Record all applicable information according to unit Standing Operating Procedures (SOP).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

DUTY AREA 21 - TARGET PRODUCTION CENTER OPERATIONS

TASK: 0844.21.01 (CORE PLUS) PREPARE/MAINTAIN A TARGET PRODUCTION MAP AND OVERLAYS

CONDITION(S): Given guidance from the CO/S-3/S-2, targeting information, the current friendly situation, radar positions, the lower left corner of the counterfire reference grid, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Post appropriate information on the following overlays:
 - a. Counterfire Reference Grid Overlay.
 - b. Ray Overlay.
 - c. Target and Target Indicator Overlay.
 - d. Coordination and Control Features Overlay.
2. Update the target production map, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: PFC

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
4. MCWP 3-16.1, Marine Artillery Support

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
-

TASK: 0844.21.02 (CORE PLUS) PREPARE/MAINTAIN THE TARGET CARD FILE

CONDITION(S): Given the target card file, target cards (DA Form 4695), a target production map, target selection standards, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Organize the target card file in two sections, one by target number and one by target type.

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- 2. Post the target or suspect target data on target card.
- 3. Check the target production map for correlations.
- 4. Circulate the targets throughout the Combat Operations Center, as necessary.
- 5. Purge the target card file when directed by the CO/S-2/S-3 Processing Section Chief.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: PFC

REFERENCE(S):

- 1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 2. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
-

TASK: 0844.21.03 (CORE PLUS) EVALUATE TARGETING INFORMATION

CONDITION(S): Given a target production map with all the required overlays, plotting equipment, the target selection standards, current friendly and enemy situations, incoming messages, targeting information produced by other intelligence sources, Shell Reports (SHELREPs), radar target cards, radar target journal, Artillery Counterfire Information Forms (DA Form 4695), Crater Analysis/Flash Ray Target Cards, Artillery Counterfire Information Journal sheets, Target Journal sheets, and the references.

STANDARD(S): Per the references, recording accurate data on the appropriate forms, cards, and journals for dissemination to the S-2/S-3.

PERFORMANCE STEPS:

- 1. Monitor the enemy deception efforts for changes to the Target Selection Standards (TSS).
- 2. Plot all data received on the appropriate overlay of the Target Production Map.
- 3. Compare new data with old to determine if enough information has been acquired to meet locally established criteria for target or target indication standards.
- 4. Complete the appropriate target card if enough data has been acquired to designate a location as a target, and pass it on to the S-2/S-3.
- 5. Complete all other required forms, cards, and journals.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 5. MCWP 3-16.1, Marine Artillery Support
- 6. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
-

TASK: 0844.21.04 (CORE PLUS) MONITOR THE OPERATION OF ALL COUNTERBATTERY RADAR (CBR) PLATOON ASSETS

CONDITION(S): Given a tactical situation, an up-to-date Target Production Map, plotting equipment, functional radios for all Counterbattery Radar (CBR) radio nets, the commander's guidance on the use of radars, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Act as net control for all Counterbattery Radar (CBR) radio assets.
 - a. Establish the required radio nets.
 - b. Monitor the nets and ensure only appropriate traffic is being passed.
 - c. Notify the supported unit communications officer when communications problems occur.
2. Assign radars to conduct friendly fire missions.
 - a. Notify the supported unit S-3 to obtain permission to conduct a mission when a firing battery calls on a Counterbattery Radar (CBR) net requesting to conduct a radar observed fire mission.
 - b. Compare the battery position, radar position, and target location to determine which radar can best conduct the mission.
 - c. Notify the firing battery to contact the radar to conduct the mission.
3. Cue the radars.
 - a. Command the radars to search for hostile weapons' locations based on guidance received from the Counterbattery Radar (CBR) platoon commander and the supported unit's S-3.
 - b. Command the radars to cease radiating if cuing sequence is not a time operation.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence

TASK: 0844.21.05 (CORE PLUS) RECOMMEND COVERAGE OF THE AREA OF OPERATIONS BY COUNTERBATTERY RADAR (CBR) ASSETS

CONDITION(S): Given a tactical situation, updated situation and target production maps, a Q-46 capabilities fan, the anticipated scheme of maneuver, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Review situation map in the Combat Operations Center.
2. Compare situation map to the Target Production Map.
3. Apply data acquired from the map review to the projected scheme of maneuver.
4. Recommend possible radar sites and azimuths of search which support present and future operations to the S-2 and/or S-3.

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INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence

DUTY AREA 23 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) INITIALIZATION

TASK: 0844.23.01 (CORE) PREPARE THE LIGHT-WEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STCP) FOR OPERATIONS

CONDITION(S): Given an operational Light-weight Computer Unit (LCU) and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Identify the Light-weight Computer Unit (LCU) components.
- 2. Cable the Light-weight Computer Unit (LCU).
- 3. Perform power up procedures.
- 4. Perform load procedures.
- 5. Record a Salvage Point Recording (SPR).
- 6. Perform power down procedures.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. LCU Job Aids
- 2. MCFSS (TPM).

ADMINISTRATIVE INSTRUCTIONS: Ensure all safety precautions are taken in accordance with the applicable TMs.

TASK: 0844.23.02 (CORE) INPUT LIGHT-WEIGHT COMPUTER UNIT (LCU) INITIALIZATION DATA

CONDITION(S): Given an operational Light-weight Computer Unit (LCU) and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Set the system date/time.
- 2. Establish target number block and alarm volume.
- 3. Set the screen time off settings.
- 4. Assign peripheral devices.
- 5. Input map modification data.
- 6. Input map center.
- 7. Restore a previously recorded data base.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

DUTY AREA 24 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) COMMUNICATIONS

TASK: 0844.24.01 (CORE) ESTABLISH IFSAS COMMUNICATIONS PARAMETERS

CONDITION(S): Given an IFSAS, radios, subscribers table, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter data net settings.
2. Enter subscriber data.
3. Enter a multi-subscriber group.
4. Enter legal messages.
5. Enter Message of Interest.
6. Modify the Priority Classification Logging and Display file.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

TASK: 0844.24.02 (CORE) COMMUNICATE USING IFSAS

CONDITION(S): Given an operational IFSAS and the references.

STANDARD(S): Per the references, verifying all communications related data is entered.

PERFORMANCE STEPS:

1. Transmit a message.
2. Receive a message.
3. Identify communications line fields.
4. Establish a fixed format relay.
5. Establish a variable format relay.
6. Print initialization data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

DUTY AREA 25 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL DATABASE
CONSTRUCTION

TASK: 0844.25.01 (CORE) INPUT DATA IN THE IFSAS SUPPORT PROGRAM

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CONDITION(S): Given an operational IFSAS, radios, and the references.

STANDARD(S): Per the references, inputting all support data into the support programs.

PERFORMANCE STEPS:

1. Enter, edit, and delete the following Light-weight Computer Unit (LCU) geometry messages.
 - a. Forward Line Of Troops (FLOT).
 - b. Coordinated Fire Line (CFL).
 - c. Fire Support Coordination Line (FSCL).
 - d. DSA.
 - e. LFSZ.
 - g. Restricted Fire Line (RFL).
 - h. Restricted Fire Area (RFA).
 - i. Air space Coordination Area (ACA).
 - j. ZONE.
2. List the correct abbreviations used in the naming of LCU geometry messages.
3. Input and retrieve survey data from the survey control file.
4. Input and transmit a radar support search message.
5. Input and transmit the different types of support filter messages.
6. Search and retrieve data stored in another LCU support program by the use of the support command XMIT TO ME function.
7. Print the support program master plan status report.
8. Display all geometry on the graphic display area.
9. Identify specific types of geometry by the use of the Graphics Line Types function.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

TASK: 0844.25.02 (CORE) INPUT DATA IN THE AMMUNITION AND FIRE UNIT PROGRAM

CONDITION(S): Given an operational IFSAS, radios, and the references.

STANDARD(S): Per the references, accurately inputting all fire unit files.

PERFORMANCE STEPS:

1. Input an AFU;UPDATE message.
2. Input a Battalion Ammunition message.
3. Input a Controlled Supply Rate message (AFU;CSR).
4. Input Ammunition Level message (AFU;AMOL).
5. Receive and transfer Registration Data message (AFU;REG).

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6. Process a Mission Fired Report message (AFU;MFR).
7. Generate a Situation Report message (AFU;SR).
8. Process required AFU;COMD message.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

DUTY AREA 26 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL FIRE CONTROL

TASK: 0844.26.01 (CORE PLUS) INPUT MODIFICATIONS TO THE COMMANDER'S CRITERIA FILE

CONDITION(S): Given an operational IFSAS, Commander's Criteria data, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Make modifications to the Fire Mission Modification message (FM;MOD).
2. Make modifications to the fire units order in the Fire Unit Selection message (FM;FUSEL).
3. Make modifications to the maximum number of volleys in the Fire Unit Selection message (FM;FUSEL).
4. Exclude a particular fire unit, fuze, and/or shell from the tactical fire solution by the use of the Fire Unit Exclusion message (FM;XCLUDE).
5. Make modifications to the commander's attack guidance by the use of the Fire Mission Attack message (FM;ATTACK).
6. Input of subordinate fire units under a Battalion Fire Direction Center (FDC) in the Center file (FM;CENTER).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

TASK: 0844.26.02 (CORE PLUS) PROCESS A FIRE MISSION REQUEST

CONDITION(S): Given two operational IFSAS's (BN Fire Direction Center (FDC) and BN Fire Support Coordination Center (FSCC)), Observer Digital Terminal (ODT), Battery Computer System (BCS), radios, fire mission data, fire mission log sheets, fire unit data base, and the references.

STANDARD(S): Per the references and the three modes of fire mission approval.

PERFORMANCE STEPS:

1. Process an adjust fire mission in the Fire Support Coordination Center (FSCC) Approval mode (Forward Observer (FO) to Bn Fire Support Coordination Center (FSCC) to Bn Fire Direction Center (FDC)).
2. Process an adjust fire mission in the Centralized mode (Forward Observer (FO) to Bn Fire Direction Center (FDC) to Btry, MOI to Bn Fire Support Coordination Center (FSCC)).

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3. Process an adjust fire mission in the Marine Expeditionary Unit (MEU) Operations mode (Forward Observer (FO) to Btry, Clearance through BLT Fire Support Coordination Center (FSCC)).
4. Mass all battalion fire units.
5. Mass all subordinate Battalions entered in the Regimental Center file.
6. Retrieve all observer location data present in another Light-weight Computer Unit (LCU) by the use of the Fire Mission Command XMIT TO ME function.
7. Recall an inactive fire mission by the use of the Fire Mission Command function.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. LCU Job Aids
 2. MCFSS (TPM).
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DUTY AREA 27 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) NONNUCLEAR FIRE PLANNING

TASK: 0844.27.01 (CORE PLUS) COMPUTE A NON-NUCLEAR FIRE PLAN

CONDITION(S): Given an operational IFSAS, radio, fire planning data, and the references.

STANDARD(S): Per the references and within twenty (20) minutes.

PERFORMANCE STEPS:

1. Build a fire plan MOD file by the use of the NNFP;COMD message.
2. Build a Fire Plan Tactical Database by the use of the Support Build (SPRT;BUILD) and (AFU;BUILD) messages.
3. Input targets into the Fire Plan Preliminary Target List (FPLST).
4. Instruct and move targets from the Fire Plan Preliminary Target List (FPLST) to the Fire Plan Target list (FPTGT), by using the instruction message (NNFP;INSTR).
5. Reserve a particular unit from firing during a particular period of the schedule by using reserve fire unit message (NNFP;RESFU).
6. Compute the fire plan by using the Compute message (NNFP;COMFP).
7. Identify the contents of the following Fire Plan output reports:
 - a. Targets In the Schedule of Fires (TISF), (NNFP;4218).
 - b. Fire Plan Summary Report (NNFP;4219).
 - c. Fire Plan Ammunition Report, (NNFP;4217).
 - d. Schedule of Fires Report (SCHEDFIR), (NNFP;4214).
8. Execute a Fire Plan once H-Hour is given by the use of the NNFP;EXECFP.
9. Generate fire plan fire commands for review, prior to transmission by the use of the execute fire plan message (NNFP;EXECFP), (NNFP;4223).
10. Transmit the following Fire Plan target files:
 - a. Fire Plan List, (NNFP;4211).
 - b. Fire Plan Target List, (NNFP;4212).
 - c. Targets in the Schedule of Fire List, (NNFP;4218).

d. Fire Plan Fire Commands, (NNFP;CFF).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

ADMINISTRATIVE INSTRUCTIONS: Time will begin after all fire planning instructions are entered.

TASK: 0844.27.02 (CORE PLUS) COMPUTE A PLANNED FAMILY OF SCATTERABLE MINES (FASCAM) MINE FIELD WITH IFSAS

CONDITION(S): Given an operational IFSAS, radio, fire plan data, and the references.

STANDARD(S): Per the references and within twenty (20) minutes.

PERFORMANCE STEPS:

1. Build a Fire Plan MOD file by the use of the NNFP;CMD message.
2. Build a Fire Plan Tactical Database by the use of the Support and AFU build message.
3. Input of Family of Scatterable Mines (FASCAM) targets into the Fire Plan.
4. Compute the Family of Scatterable Mines (FASCAM) Fire Plan by the use of the NNFP;FASCAM message.
5. Analyze generated Fire Plan Exceptions.
6. Transmit fire commands to the firing unit.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. LCU Job Aids
2. MCFSS (TPM).

ADMINISTRATIVE INSTRUCTIONS: The FASCAM fire plan must be computed within 20 minutes. Time will begin upon entry of the FASCAM target data.

DUTY AREA 28 - AN/PSN-11 PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)

TASK: 0844.28.01 (CORE PLUS) PERFORM SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Adjust the display backlighting.
2. Display the keypad map.
3. Perform the PLGR self test.
4. Select an operating mode and SV type.
5. Setup units of measurement.
6. Select magnetic variation.

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- 7. Select elevation hold, time, and error formats.
- 8. Select a horizontal datum.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0844.28.02 (CORE PLUS) CHANGE THE MEMORY BATTERY IN THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a DC power supply and the reference.

STANDARD(S): Per the reference, executing proper procedures.

PERFORMANCE STEPS:

- 1. Identify the difference between the memory battery and a standard AA battery.
- 2. Explain the consequences of improperly changing the memory battery or of allowing the memory battery to die.
- 3. Apply the procedures for changing the memory battery.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0844.28.03 (CORE PLUS) APPLY PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE FOR THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine the need for performing an Emergency Zeroize.
- 2. Perform an Emergency Zeroize.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

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PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: The BA-5800 lithium battery is dangerous if mishandled.

The Marine is not required to perform the zeroize for evaluation purposes.

TASK: 0844.28.04 (CORE PLUS) IDENTIFY ERRORS CAUSING AN/PSN-11 (PLGR) WARNING DISPLAYS

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference, accurately identifying the error and taking the appropriate corrective action.

PERFORMANCE STEPS:

1. Identify the error and take corrective action for the following error warnings:
 - a. "Low Memory Battery".
 - b. "Low Primary Battery".
 - c. "External Power Lost".
 - d. "External Antenna Lost".
 - e. "External Antenna Fault".
 - f. "Emergency Zeroize Passed".
 - g. "Emergency Zeroize Failed".
 - h. "Invalid Key Entered".
 - i. "Bad Key Detected".
 - j. "No Key For Tomorrow".
 - k. "Not Enough Keys For Mils Dur".
 - l. "Too Many Keys For Mis Dur".
 - m. "Check GUV Issue Number".
 - n. "Insufficient Y-code SVs".
 - o. "Possible Spoofers".
 - p. "Zeroized Failed".
 - q. All Keys Zeroized".

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: The BA-5800 lithium battery is dangerous if mishandled.

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TASK: 0844.28.05 (CORE PLUS) PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply, 1:50,000 scale mapsheet of the area, a trig list, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Navigate to a location in the 2Dfast mode.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0844.28.06 (CORE PLUS) DETERMINE A POSITION WITH THE AN/PSN-11 (PLGR) IN THE AVERAGING MODE

CONDITION(S): Given a PLGR with a power supply, an area free of signal masks, a 1:50,000 scale mapsheet, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
- 2. Select the SETUP option on the MENU screens.
- 3. Change the setup mode to CONT.
- 4. Verify horizontal and vertical datum selected in the PLGR against the mapsheet.
- 5. Ensure the Almanac Age is current.
- 6. Verify the PLGR has a valid Cryptographic fill.
- 7. Remain in the CONT mode until FOM of ONE is obtained.
- 8. Change the setup mode to AVG.
- 9. Allow the PLGR to record, per unit Standing Operating Procedures (SOP), ensuring the FOM remains ONE for the entire operation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0844.28.07 (CORE PLUS) ENTER A USER DEFINED DATUM IN THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply, the references, a 1:50,000 scale mapsheet referenced to a horizontal datum not programmed in the PLGR, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine the horizontal datum from the mapsheet.
2. Extract user defined data from the references.
3. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
4. Select the INIT option on the MENU screens.
5. Enter the user defined data on Page 4 or 5 of the INIT displays.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
 2. AN/PSN-11 PLGR Handbook
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TASK: 0844.28.08 (CORE PLUS) PERFORM DATUM TRANSFORMATIONS WITH THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply and one stored waypoint, a 1:50,000 scale mapsheet referenced to a horizontal datum that is different than the datum of the stored waypoint but is a programmed datum in the PLGR, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
2. Select the edit menu of the WP menu.
3. Change the horizontal datum.
4. Store the change.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
 2. AN/PSN-11 PLGR Handbook
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TASK: 0844.28.09 (CORE PLUS) PERFORM PLGR TO PLGR OPERATIONS

CONDITION(S): Given one PLGR with a power supply, a one day almanac, several stored waypoints, user defined datums, a lock on at least one satellite, a second PLGR with a power supply, a PLGR to PLGR cable, and the reference.

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STANDARD(S): Per the reference, successfully transferring selected data from one PLGR to the other.

PERFORMANCE STEPS:

1. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
2. Ensure that both PLGRs have STANDARD selected for interface operations.
3. Select the DATA-XFER option of the menu.
4. Attach the PLGR to PLGR cable to the J-2 (RS-232) port on each PLGR.
5. Transfer all data from one PLGR to the other.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

TASK: 0844.28.10 (CORE PLUS) LOAD CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT WITH THE AN/PSN-11 (PLGR)

CONDITION(S): Given one PLGR with a power supply, an AN/CYZ-10, survey and communications equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Transfer crypto variables to applicable communications equipment.
2. Transfer accurate time to applicable communications equipment.
3. Transfer crypto variables to applicable survey equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

DUTY AREA 29 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) OPERATIONS

TASK: 0844.29.01 (CORE PLUS) ESTABLISH A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a single station Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Configure a single workstation Operational Facility (OPFAC).
2. Power a single workstation Operational Facility (OPFAC).
3. Login at Defense Infra structure Information Common Operating Environment (DII COE).
4. Start AFATDS.
5. Restore database.
6. Ensure validity of the unit configuration window.
7. Replace default database.
8. Ensure recognition of communications modems
9. Edit workstation name (optional).
10. Configure printer.
11. Activate OPFAC.
12. Load V-MAP (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.02 (CORE PLUS) ESTABLISH A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a multi-workstation Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Configure a multi-workstation Operational Facility (OPFAC).
2. Power a multi-workstation Operational Facility (OPFAC).
3. Change machine ID, if required.
4. Login at DII COE.
5. Start AFATDS at master.
6. Enter multi-workstation Operational Facility (OPFAC) name.
7. Start AFATDS at slave(s).
8. Enter the multi-workstation Operational Facility (OPFAC) name at the slaves.
9. Restore database at the master.
10. Ensure the validity of the unit configuration window.
11. Replace default database.

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- 12. Activate master workstation.
- 13. Configure printer(s).
- 14. Associate assignments to workstations.
- 15. Load V-Maps (optional).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.03 (CORE PLUS) PERFORM EXIT PROCEDURES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Exit AFATDS at specific workstations within an Operational Facility (OPFAC).
- 2. Exit AFATDS for an entire Operational Facility (OPFAC).
- 3. Exit AFATDS for an Operational Facility (OPFAC) at a specific time.
- 4. Exit a user account.
- 5. Shutdown hardware at an Operational Facility (OPFAC).
- 6. Turn off power.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.04 (CORE PLUS) ENTER A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given a AFATDS OPFAC, operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter configuration name.
- 2. Enter network parameters.
- 3. Enter destination stations.
- 4. Enter routing data.

5. Perform functions from the COMM Configuration Menu.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.05 (CORE PLUS) IMPLEMENT A COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC) with a planned communications configuration entered, operations order, and references.

STANDARD(S): Per the references, ensuring message transmission.

PERFORMANCE STEPS:

- 1. Select the planned configuration as NEW CURRENT.
- 2. Associate channels to communication networks.
- 3. Turn on all nets.
- 4. Transmit test messages.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.06 (CORE PLUS) ENTER DISTRIBUTION DATA

CONDITION(S): Given a AFATDS OFFAC, operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Assign units to distribution lists.
- 2. Enter distribution list criteria.
- 3. Execute distribution list functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.07 (CORE PLUS) INPUT AFATDS DATABASE UPDATES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, tactical situation, geometry data, meteorological data, logistical data, and the references.

STANDARD(S): Per the references and including unit data, geometry, meteorological data, and logistical data.

PERFORMANCE STEPS:

1. Enter unit data.
2. Enter geometry.
3. Enter meteorological data.
4. Enter unit logistical data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.08 (CORE PLUS) ENTER TARGET GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander’s guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter target selection standards.
2. Enter high value target list data.
3. Enter Target Management Matrix (TMM) data.
4. Enter mission prioritization data.
5. Enter mission routing data.
6. Enter special target allocation data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.09 (CORE PLUS) ENTER FIRE SUPPORT ATTACK GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Fire Support (FS) attack guidance, and the references.

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STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter air attack methods.
2. Enter Naval Surface Fire Support (NSFS) attack methods.
3. Enter mortar attack methods.
4. Enter mortar restrictions.
5. Enter mortar immediate attack methods.
6. Enter aviation attack methods.
7. Enter system attack perimeters.
8. Enter munitions restrictions.
9. Enter system task list data.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.10 (CORE PLUS) ENTER UNIT AND SENSOR GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter CSR guidances.
2. Enter reporting guidances.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.11 (CORE PLUS) ENTER FIELD ARTILLERY (FA) ATTACK GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Field Artillery (FA) attack guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter Field Artillery (FA) preference table.

- 2. Enter Field Artillery (FA) cannon attack method.
- 3. Enter Field Artillery (FA) restriction.
- 4. Enter Field Artillery (FA) immediate attack method.
- 5. Enter rocket/missile attack methods.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.12 (CORE PLUS) ENTER COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC); operations order; Command, Control, and Communications (C3) guidance; and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter meteorological guidance.
- 2. Enter movement guidance.
- 3. Enter survey guidance.
- 4. Enter Multiple Launch Rocket System (MLRS) guidance.
- 5. Enter FDS guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.13 (CORE PLUS) ENTER MISCELLANEOUS GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, miscellaneous guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Continuous Operations (CONOPS) guidance.
- 2. Enter target decay time guidance.
- 3. Enter target duplication guidance.
- 4. Enter Fire Support (FS) system buffer distance guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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ENCLOSURE (3)

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.14 (CORE PLUS) ENTER INTERVENTION POINT DATA

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter mission precedence criteria.
2. Enter battle area criteria.
3. Enter mission type criteria.
4. Enter target type criteria.
5. Enter target filter criteria.
6. Enter analysis result criteria.
7. Enter attack option criteria.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.15 (CORE PLUS) PROCESS TARGET REPORTS

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter target block number allocation.
2. Perform target file maintenance (target lists, duplicates, coordination).
3. Process target indicator data.
4. Process suspect target data.
5. Initiate a fire mission.
6. Perform target process functions (find target, fire target, cancel Record As Target (RAT), End Of Mission (EOM), checkfiring).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.16 (CORE PLUS) PROCESS A FIRE REQUEST

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, fire request, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Perform fire mission file maintenance (active mission monitor, Mission Fired Report (MFR) monitor, active fire mission window, End Of Mission (EOM), Record As Target (RAT).
- 2. Perform munition calculation procedures.
- 3. Reprocess a fire request.
- 4. Process a clearance request.
- 5. Process a coordination request.
- 6. Process fire missions requiring additional information.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.17 (CORE PLUS) BUILD A SCHEDULE OF FIRES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, target list, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target groups.
- 2. Enter series.
- 3. Enter a fire plan.
- 4. Transmit a fire plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

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- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.18 (CORE PLUS) IMPLEMENT A PLANNED SITUATION INTO CURRENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, plan, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Edit unit locations.
- 2. Edit the fire plan.
- 3. Recompute schedule of fires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.19 (CORE PLUS) ENTER UNIT MOVEMENT INFORMATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter movement guidance.
- 2. Enter movement factors.
- 3. Build a movement overlay.
- 4. Establish routes.
- 5. Establish a move.
- 6. Deconflict unit moves.
- 7. Request move approval.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0844.29.20 (CORE PLUS) PERFORM CONTINUOUS OPERATIONS (CONOPS)

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Continuous Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter Continuous Operations (CONOPS) guidance.
2. Transmit CONOPS guidance and associated BASIC/General Unit date.
3. Enable/disable Mission Fired Report (MFR)/Inactive target purge.
4. Update communication configuration.
5. Transmit Continuous Operations (CONOPS) notification.
6. Activate backup Operational Facilities (OPFACs).
7. Activate satellite Operational Facilities (OPFACs).
8. Clear principle Operational Facility (OPFAC) mission interventions.
9. Transmit Continuous Operations (CONOPS) ready message.
10. Activate Continuous Operations (CONOPS) guidance.
11. Process Continuous Operations (CONOPS) activation messages.
12. Transmit active target list to backup Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.21 (CORE PLUS) CREATE A TRIGGER EVENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), Operations Order, commander’s guidance, a tripped trigger event, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Establish a trigger event rule.
2. Establish the trigger function.
3. Establish the trigger event state.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)

3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0844.29.22 (CORE PLUS) TAKE ACTIONS UPON A TRIGGERED EVENT BEING TRIPPED

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), Operations Order, commander's guidance, a tripped trigger event, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Direct the implementation of the prescribed actions.
- 2. Direct the actions on automatically generated functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

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MOS 0847, ARTILLERY METEOROLOGICAL MAN

DUTY AREA 01 - METEOROLOGICAL GENERAL

TASK: 0847.01.01 (CORE) EMPLACE THE METEOROLOGICAL MEASURING SET (MMS) SHELTER

CONDITION(S): Given a complete Meteorological Measuring Set (MMS), a remote antenna site, an assistant, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Emplace the Meteorological Measuring Set (MMS) shelter.
2. Install antennas on the Meteorological Measuring Set (MMS) shelter.
3. Emplace the remote NAVAID antenna assembly.
4. Inspect and test the grounding of equipment.

NOTE: Ensure all cables and wires are unbroken and all clamps, lugs, and screws are tight.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
-

TASK: 0847.01.02 (CORE) POWER UP/DOWN THE METEOROLOGICAL MEASURING SET (MMS)

CONDITION(S): Given a complete Meteorological Measuring Set (MMS) and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Establish AC system power.
2. Establish DC system power.
3. Perform emergency shut down procedures.
 - a. Operate with auxiliary power failure.
 - b. Recover flight data.
4. Enter initialization data into the Meteorological Measuring Set (MMS) computer.
5. Enter current time and date.
6. Enter grid coordinates using one of the following:
 - a. Geographic.
 - b. Universal Transverse Mercator (UTM).
 - c. Military Grid Reference System (MGRS).
7. Verify system initialization data.
8. Enter ground Meteorological (MET) data into the Meteorological Measuring Set (MMS) computer.
 - a. Enter each item of ground Meteorological (MET) data into the computer as prompted by the Marwin.

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- b. Verify Meteorological MET data on the AN/TMQ-50.
- c. If remote launch, enter location of balloon launch site.
- d. Verify data entries, as prompted by the Marwin.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0847.01.03 (CORE) ENTER RADIOSONDE CALIBRATION DATA INTO THE MARWIN

CONDITION(S): Given an operational Meteorological Measuring Set (MMS), a radiosonde calibration tape, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter pressure data via paper tape reader (primary method) or via Marwin keypad (secondary).
- 2. Verify entered data is correct.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0847.01.04 (CORE) ESTABLISH DIGITAL COMMUNICATIONS

CONDITION(S): Given the reference, and an operational Meteorological Measuring Set (MMS) with all shelter units turned ON and all necessary subscriber information.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Establish voice communications.
- 2. Establish digital communications.
- 3. Process incoming messages.
- 4. Select and transmit digital messages.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0847.01.05 (CORE) PREPARE EQUIPMENT FOR ELECTRONIC FLIGHT

CONDITION(S): Given an Inflation Nomograph, weight tables, the balloon size, Radiosonde, weather conditions, and the references.

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STANDARD(S): Per the references, accurately determining the total weight and total applied weight and cubic feet of gas required for the flight balloon to the nearest 0.1 cubic feet.

PERFORMANCE STEPS:

1. Select appropriate radiosonde for mission.
2. Inspect the radiosonde.
 - a. Temperature sensor and outrigger arm.
 - b. Humidity compartment and modular compartment.
 - c. Baroswitch assembly and clean commutator bar.
3. Using nomograph, determine the metered cubic feet required for total lift.
4. Determine the total weight and total applied weight.
 - a. Determine free lift weight and balloon weight.
 - b. Determine total attachment weights.
 - c. Determine weights necessary for adverse weather conditions.
 - d. Determine the total weight for the required flight.
 - e. Determine the total applied weight.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
2. RN AM33AQ, Inflation of Balloons

TRAINING MATERIEL:

1. * Balloon, MET 100 (NSN: 6660-00-151-7772)
2. * Balloon, MET 100 (NSN: 6660-00-151-7773)
3. * Balloon, MET 1000 (NSN: 6660-00-809-5114)
4. * Balloon, MET 300 (NSN: 6660-00-515-4214)
5. * Barometer, Aneroid (NSN: 6660-01-316-3652)
6. * Bottled Hydrogen
7. * Hose, MET (NSN: 4730-00-263-3306)
8. * Meter, Volume, HY (NSN: 6660-00-999-2661)
9. * Nozzle, MET (NSN: 6660-00-818-6630)
10. * Parachute, MET (NSN: 6666-00-408-4178)
11. * Psychrometer (NSN: 6660-00-223-5084)
12. * Radiosonde, LORAN (NSN: 6660-01-340-7906)
13. * Radiosonde, Omega (NSN: 6660-01-353-8792)
14. * Radiosonde, RDF (NSN: 6660-01-353-8793)
15. * Sledge Hammer (NSN: 5120-00-224-4128)
16. * Tool Kit, Electronic (NSN: 5180-00-408-1859)

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17. * Twine, Fibrous (NSN: 5120-01-013-1767)

TASK: 0847.01.06 (CORE) DETERMINE AND RECORD SURFACE DATA USING THE AN/TMQ-50 SURFACE MET SENSOR

CONDITION(S): Given a AN/TMQ-50 Surface MET Sensor and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Set up AN/TMQ-50 in stand alone mode.
 - a. Record wet and dry bulb temperatures to within +/- 0.1 degree Centigrade.
 - b. Determine the relative humidity within +/- 1%.
 - c. Determine surface winds.
 - d. Determine surface wind speed and direction.
 - e. Record all measured and observed data.
2. Set up AN/TMQ-50 in automated mode.

NOTE: Verify all received surface data in the Marwin.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. Users Manual, AN/TMQ-50
2. MCWP 3-16.5, Field Artillery Meteorology
3. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0847.01.07 (CORE) DETERMINE AND RECORD SURFACE DATA

CONDITION(S): Given a psychrometer or psychron, barometer, anemometer, and references.

STANDARD(S): Per the references, including the relative humidity, surface pressure, and the wind speed and direction.

PERFORMANCE STEPS:

1. Read the psychrometer/psychron within +/- 0.1 degree Celsius.
2. Determine the relative humidity within +/- 1%.
3. Determine surface winds.
4. Determine surface wind speed and direction.
5. Record all measured and observed surface data.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. Psychro Metric slide #512395
2. MCRP 3-16.5A, Tables for Artillery Meteorology (Visual) Ballistic Type 3 and Computer Messages and Limited Surface Observations
3. MCWP 3-16.5, Field Artillery Meteorology

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- 4. RN AM**AD-A, Surface Equipment (Barometer, Psychrometer, and Anemometer)
- 5. TM 11-2421, Barometers ML-331/TM, ML-332/TM, ML-333/TM, and Mercurial Barometers ML-330/FM and ML-330A/FM
- 6. TM 11-427, Barometers ML-102-B, ML-102-D, ML-102-E, ML-102-F, ML-102-G, and ML-316/TM

ADMINISTRATIVE INSTRUCTIONS: This task will be performed in an area protected from the elements.

TASK: 0847.01.08 (CORE) SET UP, LEVEL, AND ORIENT A MET THEODOLITE

CONDITION(S): Given a tripod mount, an ML-474/UM or SU-134/MDS theodolite, the magnetic declination for the area, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Set up, level, and orient the ML-474/GM or SU-134/MDS theodolite.
- 2. Orient magnetically.
- 3. Orient using survey data.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. RN AM33AE, Theodolite ML-474/GM
- 2. TM 11-6675-200-10, Operator’s Manual: Theodolite ML-46C through ML-47R, ML-247, and ML-0247A, and Double Center Theodolite ML-474/Gm and ML-474A/GM

TASK: 0847.01.09 (CORE) SET UP, LEVEL, AND ORIENT A ELECTRONIC MET THEODOLITE

CONDITION(S): Given a tripod mount, Electronic MET Theodolite, the magnetic declination for the area, Survey data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Set up, level, establish power (batteries), and orient the Electronic MET Theodolite.
- 2. Orient magnetically.
- 3. Orient using Survey data.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. Users Manual, Electronic Met Theodolite

TASK: 0847.01.10 (CORE) PERFORM TRACKING WITH A MET THEODOLITE

CONDITION(S): Given an emplaced and oriented theodolite, a pilot balloon, a launch crew, a MET computer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Execute launch and track a pilot balloon.

2. When mission is complete, enter and compute data using MET computer.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. Users Manual, Electronic Met Theodolite
2. MCWP 3-16.5, Field Artillery Meteorology

TRAINING MATERIEL:

1. * Balloon, MET 100 (NSN: 6660-00-151-7772)
2. * Balloon, MET 100 (NSN: 6660-00-151-7773)
3. * Balloon, MET 1000 (NSN: 6660-00-809-5114)
4. * Balloon, MET 300 (NSN: 6660-00-515-4214)
5. * Barometer, Aneroid (NSN: 6660-01-316-3652)
6. * Bottled Hydrogen
7. * Hose, MET (NSN: 4730-00-263-3306)
8. * Meter, Volume, HY (NSN: 6660-00-999-2661)
9. * Nozzle, MET (NSN: 6660-00-818-6630)
10. * Psychrometer (NSN: 6660-00-223-5084)
11. * Sledge Hammer (NSN: 5120-00-224-4128)
12. * Twine, Fibrous (NSN: 5120-01-013-1767)

TASK: 0847.01.11 (CORE) RECORD A METEOROLOGICAL MESSAGE

CONDITION(S): Given a DA Form 3677 (Computer MET Message), identification line data, the zone data, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Record a computer MET message.
 - a. Record the message identification line data.
 - b. Record the zone data in the body portion of the message.
 - c. Fill out the administrative section of the message.
2. Record a target acquisition MET message.
 - a. Fill out identification line.
 - b. Fill in message body.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. MCRP 3-16.5A, Tables for Artillery Meteorology (Visual) Ballistic Type 3 and Computer Messages and Limited Surface Observations
2. MCWP 3-16.5, Field Artillery Meteorology
3. QSTAG 389, Standard Target Acquisition Met Message

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4. STANAG 4140, Standard Target Acquisition Met Message

ADMINISTRATIVE INSTRUCTIONS: Perform this task in an area protected from the elements.

TASK: 0847.01.12 (CORE) PERFORM AND RECORD A LIMITED SURFACE OBSERVATION (SUPREP)

CONDITION(S): Given a DA Form 5033-R (Limited Surface Observation), an anemometer, a psychrometer, a barometer, an AN/TMQ-50, MET station data, and references.

STANDARD(S): Per the references, accurately determining and recording surface weather.

PERFORMANCE STEPS:

1. Record station information.
2. Estimate present weather and terrain conditions and record them on the limited surface observation form, using tables in FM 6-16-2.
3. Measure and record surface data.
4. Record any additional remarks on current weather which might be helpful to military operations in the remarks block on the bottom of the form.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. FM 6-16-2, Tables for Artillery Met, Visual Ballistic Type 3 , Computer Met Message and Limited Surface Observation
 2. MCRP 3-16.5A, Tables for Artillery Meteorology (Visual) Ballistic Type 3 and Computer Messages and Limited Surface Observations
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TASK: 0847.01.13 (CORE PLUS) DETERMINE AND RECORD LOCATION AND HEIGHT OF THE METEOROLOGICAL STATION

CONDITION(S): Given a map, a coordinate scale, a meteorological message form, straight edge, protractor, three identifiable terrain features, an AN/PSN-11 PLGR, a theodolite, and the references.

STANDARD(S): Per the references, determining the grid coordinates of the meteorological station within 100 meters and the height within 10 meters.

PERFORMANCE STEPS:

1. Determine your location by terrain association.
2. Determine six-digit grid coordinates by resection.
3. Record MET station location in Universal Transverse Mercator (UTM), Military Grid Reference System (MGRS), or Geographic coordinates.
4. Use map to determine height of the Meteorological (MET) station.
5. Verify location and height using an AN/PSN-11 PLGR.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Cpl

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation
 2. MCWP 3-16.3, Field Artillery Cannon Battery
 3. MCWP 3-16.5, Field Artillery Meteorology
 4. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11
-

TASK: 0847.01.14 (CORE) IDENTIFY SIGNIFICANT WEATHER CHANGES

CONDITION(S): Given a change of weather during the sounding schedule, a stopwatch or timer, an inflated pilot balloon, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Identify frontal passages.
2. Inform supported units if data is invalid due to frontal passage.
3. Adjust sounding schedule, ensuring valid data is supplied to supported units.
4. Identify the types and heights of clouds.
 - a. Release the balloon and record the time the balloon remains visible before entering cloud.
 - b. Compute height of cloud by multiplying time recorded by rate of rise.
 - c. Identify clouds as Low, Middle, or High.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. FMH #1, Federal Meteorological Handbook, Surface Observations
 2. MCRP 3-16.5A, Tables for Artillery Meteorology (Visual) Ballistic Type 3 and Computer Messages and Limited Surface Observations
 3. MCWP 3-16.5, Field Artillery Meteorology
-

TASK: 0847.01.15 (CORE) PREPARE AND RELEASE A METEOROLOGICAL MEASURING SET (MMS)
BALLOON TRAIN

CONDITION(S): Given an operational Meteorological Measuring Set (MMS), a tested radiosonde, an activated radiosonde battery, an inflated balloon with accessories, the surface wind speed, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Prepare radiosonde for launch.
 - a. Check the radiosonde's baroswitch contact arm and ensure it is in the down position.
 - b. Replace radiosonde sleeve.
 - c. If NAVAID sounding, install LORAN or GPS antenna.
 - d. If RDF sounding, inspect RDF antenna on radiosonde.
 - e. Install radiosonde battery.
 - f. Ensure temperature sensor outrigger arm is fully extended.
2. Release a Meteorological Measuring Set (MMS) balloon train using the appropriate method.
 - a. Perform Hand-Over-Hand Method (relatively calm winds).
 - b. Perform Two-Man Running Release/Without Reel (moderate to high winds).
 - c. Perform Two-Man Running Release/With Reel (exceptionally high winds).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TRAINING MATERIEL:

- 1. * Balloon, MET 100 (NSN: 6660-00-151-7772)
- 2. * Balloon, MET 100 (NSN: 6660-00-151-7773)
- 3. * Balloon, MET 1000 (NSN: 6660-00-809-5114)
- 4. * Balloon, MET 300 (NSN: 6660-00-515-4214)
- 5. * Barometer, Aneroid (NSN: 6660-01-316-3652)
- 6. * Bottled Hydrogen
- 7. * Hose, MET (NSN: 4730-00-263-3306)
- 8. * Meter, Volume, HY (NSN: 6660-00-999-2661)
- 9. * Nozzle, MET (NSN: 6660-00-818-6630)
- 10. * Parachute, MET (NSN: 6666-00-408-4178)
- 11. * Psychrometer (NSN: 6660-00-223-5084)
- 12. * Radiosonde, LORAN (NSN: 6660-01-340-7906)
- 13. * Radiosonde, Omega (NSN: 6660-01-353-8792)
- 14. * Radiosonde, RDF (NSN: 6660-01-353-8793)
- 15. * Sledge Hammer (NSN: 5120-00-224-4128)
- 16. * Tool Kit, Electronic (NSN: 5180-00-408-1859)
- 17. * Twine, Fibrous (NSN: 5120-01-013-1767)

TASK: 0847.01.16 (CORE) EMPLACE, ALIGN, AND STOW THE RADIO DIRECTION FINDER (RDF) ANTENNA

CONDITION(S): Given a Meteorological Measuring Set (MMS), an identified Radio Direction Finder (RDF) site, identified orientation point, an assistant, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Assemble the Radio Direction Finder (RDF) antenna.
- 2. Align the Radio Direction Finder (RDF) antenna on orientation point and determine front direction angle.
- 3. Upon command of shelter operator, stow lock the Radio Direction Finder (RDF) antenna.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0847.01.17 (CORE) ESTABLISH TRACKING MODES FOR AN ELECTRONIC FLIGHT

CONDITION(S): Given an operational Meteorological Measuring Set (MMS) with preflight procedures in progress and the references.

STANDARD(S): Per the references, including the LORAN, Global Positioning System (GPS), and Radio Direction Finder (RDF) tracking modes.

PERFORMANCE STEPS:

- 1. Establish the LORAN tracking mode.
 - a. Select LORAN stations and evaluate geometry of selected stations.
 - b. Evaluate the LORAN station’s status.
 - c. Verify LORAN synchronization.

- 2. Establish the Global Positioning System (GPS) tracking mode.

NOTE: Evaluate GPS status.

- 3. Establish the Radio Direction Find (RDF) tracking mode.

NOTE: Select RDF submode.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0847.01.18 (CORE) MONITOR AN ELECTRONIC FLIGHT (NAVAID OR RDF)

CONDITION(S): Given an operational Meteorological Measuring Set (MMS) and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Monitor a Meteorological Measuring Set (MMS) NAVAID flight.
 - a. Check mission time and Meteorological (MET) data update.
 - b. Verify signal strength and correct frequency.
 - c. Monitor radiosonde altitude information and reacquire lost radiosonde signal, as required.
 - d. Switch NAVAID antenna during flight.
 - e. Terminate and save flight data at end of mission requirement.
 - f. Process flight information.
- 2. Monitor a Radio Direction Finder (RDF) flight.
 - a. Check mission time and Meteorological (MET) data update.
 - b. Verify signal strength and correct frequency.
 - c. Monitor radiosonde altitude information and reacquire lost radiosonde signal, as required.
 - d. Terminate and save flight data at end of mission requirement.
 - e. Process flight information.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

1. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
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TASK: 0847.01.19 (CORE PLUS) PREPARE A LOADING PLAN FOR A METEOROLOGICAL (MET) SECTION

CONDITION(S): Given a complete Meteorological (MET) section authorized by the unit Table of Organization and Equipment (T/O and T/E) and the reference.

STANDARD(S): Per the reference, ensuring the plan includes proper loading of equipment, personnel, and supplies.

PERFORMANCE STEPS:

1. Determine what items will be loaded on each truck or trailer.
2. Determine weight and volume of equipment and supplies, ensuring the authorized weight or volume of the truck or trailer is not exceeded.
3. Make a detailed drawing illustrating the type, amount, and location of the equipment or supplies loaded on each truck and trailer.
4. Make provisions for transporting section personnel and personal equipment.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology

DISTANCE LEARNING PRODUCT(S):

1. 045, The Logistics/Embarkation Specialist
 2. 047, Introduction to Amphibious Embarkation
-

TASK: 0847.01.20 (CORE PLUS) PLAN THE DESTRUCTION OF THE METEOROLOGICAL (MET) SECTION'S EQUIPMENT AND MATERIAL TO PREVENT ENEMY USE

CONDITION(S): Given Meteorological (MET) section equipment and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Review unit tactical Standing Operating Procedures (SOP) for destruction of equipment.
2. Review the references to determine the most feasible means of destruction of Meteorological (MET) section equipment.
3. Establish a plan and priority of destruction.
4. Conduct training in destruction of equipment.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)
-

TASK: 0847.01.21 (CORE) DESTROY METEOROLOGICAL EQUIPMENT

CONDITION(S): Given a Meteorological (MET) section with all equipment and personnel, a simulated/actual emergency wherein the position is about to be overrun, the order to perform emergency destruction on equipment, and the references.

STANDARD(S): Per the references, ensuring inoperability. (SIMULATED in a training scenario)

PERFORMANCE STEPS:

- 1. Determine the most appropriate method to accomplish destruction of equipment.
- 2. Ensure equipment is destroyed.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: LCpl

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
- 3. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

TASK: 0847.01.22 (CORE) PERFORM OPERATOR’S MAINTENANCE CHECKS AND SERVICES ON METEOROLOGICAL EQUIPMENT

CONDITION(S): Given a Meteorological Measuring Set (MMMS), operational maintenance equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Perform operator troubleshooting procedures.
 - a. Locate operator level fault list in symptom index.
 - b. Perform operator troubleshooting using troubleshooting table.
 - c. Remove and replace defective part or parts, if authorized.
- 2. Perform operator preventive maintenance.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: Pvt

REFERENCE(S):

- 1. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0416, The Marine Corps Publications and Directives System

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MOS 0848, FIELD ARTILLERY OPERATIONS MAN

DUTY AREA 01 - FIRE DIRECTION CENTER (FDC) GENERAL

TASK: 0848.01.01 (CORE) APPLY THE PRINCIPLE OF ARTILLERY BALLISTICS TO ARTILLERY FIRES

CONDITION(S): Given a list of artillery ballistic terms and the references.

STANDARD(S): The Marine must define and explain the causes and effects of each term, and its relationship to artillery accuracy and massing of fires, per the references.

PERFORMANCE STEPS:

1. Define Interior Ballistics and its effect on accuracy and massing fires.
2. Define Transitional Ballistics.
3. Define Exterior Ballistics and its effect on accuracy and massing fires.
4. Define Dispersion and Probability.
5. Define Inherent Error.
6. Define the Mean Point of Impact.
7. Define Probable Error.
8. Define Range Probable Error.
9. Define Deflection Probable Error.
10. Define Time to Burst Probable Error.
11. Define Height of Burst Probable Error.
12. Define Range to Burst Probable Error.
13. Define Fork.
14. Define Dispersion Zones.
15. Demonstrate the usage of the Assurance Table in determining Registration Validity.
16. Demonstrate the usage of the Assurance Table in determining Muzzle Velocity Variation Validity.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.01.02 (CORE) DETERMINE THE BATTERY FIRE ORDER STANDING OPERATING PROCEDURES (SOP) AND FIRE COMMAND STANDARDS

CONDITION(S): Given an operational Fire Direction Center (FDC), operations order, situation map, commander's guidance, ammunition, target attack considerations, a unit currently available to fire, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the fire order Standing Operating Procedures (SOP).
2. Announce the fire order Standing Operating Procedures (SOP).

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- 3. Determine the fire command standards.
- 4. Announce the fire command standards.
- 5. Verify the fire order Standing Operating Procedures (SOP) and fire command standards are recorded and displayed in the Fire Direction Center (FDC).
- 6. Verify the fire command standards are announced to the firing battery.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.01.03 (CORE PLUS) DETERMINE THE AMOUNT AND TYPE OF MUNITIONS NEEDED TO ACHIEVE SUPPRESSION, NEUTRALIZATION, OR DESTRUCTION OF TARGETS

CONDITION(S): Given an operations order, situation map, commander’s guidance, a target description, a Graphic Munitions Effects Table (GMET) or Joint Munitions Effects Manual (JMEM), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Extract the appropriate type and number of munitions from the Graphic Munitions Effects Table (GMET), based on the target description, commander’s guidance, unit Standing Operating Procedures (SOP), and the references.
- 2. Extract the appropriate type and number of munitions from the Joint Munitions Effects Manual (JMEM) based on the target description, commander’s guidance, unit Standing Operating Procedures (SOP), and the references.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121-1, Joint Munitions Effect Manual (JMEM)
 - 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.01.04 (CORE) DETERMINE AND ANNOUNCE THE BATTERY FIRE ORDER

CONDITION(S): Given an operations order, a situation map, commander’s guidance, Fire Order Standing Operating Procedures (SOP), Fire Command Standards, a Call For Fire and/or a Battalion Fire Order, ammunition, firing unit currently available to fire, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the target is plotted, ensuring the appropriate clearance is obtained, if required.
- 2. Determine the fire order in accordance with the fire order Standing Operating Procedures (SOP) and other fire order considerations.
- 3. Issue the fire order in accordance with the fire order Standing Operating Procedures (SOP) and other fire order considerations.
- 4. Ensure the fire mission is conducted in accordance with the fire order.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121-1, Joint Munitions Effect Manual (JMEM)

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- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
- 3. ST 6-40-2, Battery Computer System BCS Job Aids

TASK: 0848.01.05 (CORE) SUPERVISE THE CONSTRUCTION AND MAINTENANCE OF A TACTICAL SITUATION MAP

CONDITION(S): Given an operational Fire Direction Center (FDC), operations order, situation map, commander’s guidance, Target List Worksheet/Scheduling Worksheet containing groups and series, Fire Support Coordination Measures (FSCM), Maneuver Control Points, Target Acquisition Assets, Friendly Unit Location and unit boundaries, enemy situation and locations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the plotting of boundaries, maneuver control points and other maneuver control measures.
- 2. Verify the plotting of all friendly units including target acquisition assets.
- 3. Verify the plotting of all Fire Support Coordination Measures (FSCM).
- 4. Verify the plotting of targets.
- 5. Verify the graphical portrayal of scheduled groups and series.
- 6. Verify the plotting of enemy units.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols
- 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0848.01.06 (CORE PLUS) PREPARE THE FIRE DIRECTION CENTER (FDC) TO CONDUCT FIRE MISSIONS INTO A SECONDARY ZONE (ZONE TO ZONE TRANSFORMATION)

CONDITION(S): Given an operational Fire Direction Center (FDC), operations order, situation map, unit Standing Operating Procedures (SOP), commander’s guidance, a scenario requiring the FDC to conduct fire missions into an adjacent zone, and the reference.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the preparation of the situation map using either the two map sheet method or the graphic method.
- 2. Verify the construction of the surveyed firing using either the two grid sheet method or the graphic method.
- 3. Verify the base map mod.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.01.07 (CORE PLUS) SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS

CONDITION(S): Given an operational Fire Direction Center (FDC), operations order, situation map, unit Standing Operating Procedures (SOP), commander’s guidance, target list, a target bulletin, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the recording of the list of targets.
2. Verify the displaying of the targets on situation map overlay and the plotting of targets on the firing chart (Battery Fire Direction Center (FDC)).
3. Identify conflicts and duplications.
4. Resolve conflicts and duplications.
5. Update the list of target/target list, as appropriate, based upon target bulletin(s).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 101-5-1, Operational Terms and Symbols
 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0848.01.08 (CORE) APPLY THE FIVE REQUIREMENTS FOR ACCURATE PREDICTED FIRE IN A COMBAT ENVIRONMENT

CONDITION(S): Given a tactical scenario in a combat environment and factors affecting the technical solution of firing data and the references.

STANDARD(S): Per the references, accurately identifying and resolving factors inhibiting the accuracy of fires from the firing unit.

PERFORMANCE STEPS:

1. Assess the firing unit’s ability to meet the five requirements for accurate predicted fire.
2. Explain the effect of each requirement on accurate predicted fires and on the ability to mass fires at all echelons.
3. Determine corrective actions required to meet the five requirements for accurate predicted fire to the tactical situation, as required.
4. Take corrective actions, as appropriate, depending on assets available, the tactical situation, and commander’s guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.01.09 (CORE) APPLY THE FIVE STEPS TO IMPROVE FIRING DATA IN A COMBAT ENVIRONMENT

CONDITION(S): Given factors affecting the technical solution of firing data, a tactical scenario in a combat environment, a requirement for the firing unit to improve the accuracy of the firing data solution, and the references.

STANDARD(S): Per the references, taking all appropriate corrective actions on a continuing basis.

PERFORMANCE STEPS:

1. Conduct accurate firing on a point of known location.
2. Determine total corrections between "should hit" and "did hit" data.
3. Quantify meteorological data.
4. Isolate position constants.
5. Update total corrections, as necessary.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

ADMINISTRATIVE INSTRUCTIONS: Corrective actions should be taken based on an analysis of Mission, Enemy, Terrain, Troops available-Time (METT-T).

TASK: 0848.01.10 (CORE) TROUBLESHOOT ERRORS IN THE FIRING DATA SOLUTION

CONDITION(S): Given a tactical scenario in a combat environment, a requirement for the firing unit to trouble shoot the firing data, and the references.

STANDARD(S): Per the references, correctly identifying errors and implementing appropriate corrective action.

PERFORMANCE STEPS:

1. Perform the survey checklist.
2. Perform the MET checklist.
3. Perform the muzzle velocity checklist.
4. Perform the registration checklist.
5. Determine appropriate corrective actions.
6. Apply appropriate corrections to the firing data solution.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 6-40-2, Field Artillery Battery Computer System Cannon Gunnery
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.01.11 (CORE PLUS) SUPERVISE THE MAINTENANCE OF FIRE DIRECTION EQUIPMENT

CONDITION(S): Given a Lightweight Computer System AN/GYK-37, Artillery Fire Direction Plotting Equipment, section cleaning equipment, Equipment Repair Order (ERO)-NAVMC Form 10245, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise the performance of operator's preventive maintenance and required repairs.

- 2. Supervise the inventory of components of end items.
- 3. Supervise the preparation, completion, submission, and monitoring of Equipment Repair Orders (EROs) into the MIMMS system.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCO P4790.2, MIMMS Field Procedures
- 2. SL-3-09702A, Marine Corps Stocklist For Plotting Equipment, Artillery Fire Direction
- 3. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software
- 4. TM 4700-15/1, Equipment Record Procedures

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System

TASK: 0848.01.12 (CORE PLUS) SUPERVISE THE DESTRUCTION OF THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a scenario involving a unit about to be overrun and the need to destroy the BCS to prevent enemy use, a Battery Computer System (BCS), the material used to destroy a BCS, and the reference.

STANDARD(S): Per the reference, ensuring destruction of the equipment (SIMULATED for training purposes).

PERFORMANCE STEPS:

- 1. Supervise the destruction of the Lightweight Computer Unit (LCU).
- 2. Ensure the HDD is destroyed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

DUTY AREA 02 - BATTERY COMPUTER SYSTEM (BCS) INITIALIZATION AND DATABASE

TASK: 0848.02.01 (CORE) SUPERVISE THE PREPARATION OF THE BATTERY COMPUTER SYSTEM (BCS) FOR OPERATION

CONDITION(S): Given vehicle with mounts for the Battery Computer System (BCS), an SL-3 complete fire control system AN/GYK-37, appropriate communication equipment, two Marines to install the equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the Battery Computer System (BCS) and peripheral components are properly mounted.
- 2. Verify the communications equipment of the Battery Computer System (BCS) is properly mounted.

3. Verify the proper cabling of the Battery Computer System (BCS), peripheral components, and communications equipment.
4. Verify the Gun Display Units (GDU) are properly wired into the Battery Computer System (BCS).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0848.02.02 (CORE) SUPERVISE THE INITIALIZATION OF THE BATTERY COMPUTER SYSTEM (BCS) AND THE CONSTRUCTION AND RECORDING OF A DATA BASE

CONDITION(S): Given an operational Battery Computer System (BCS), data base information, a map of the operational area, firing unit information, a current computer Meteorological (MET) message, observer information, target/known point information, a BCS operator, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Monitor power-up procedures.
2. Verify the loading of the PLU and the performing of diagnostic tests, if applicable.
3. Verify the loading of the applicable weapons dependent program.
4. Verify entries in the linked formats.
5. Verify Meteorological (MET), Muzzle Velocity Variances (MVVs), geometry, observer, and target/known point information are entered.
6. Verify the recording of the data base.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
2. TM 11-7440-283-12-1-1, Operator's Manual, Computer Group, Gun Direction

TASK: 0848.02.03 (CORE) SUPERVISE THE LOADING AND UPDATE OF A PREVIOUSLY RECORDED DATA BASE USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a previously recorded data base, current data base information, a map of the operational area, an operations order, firing unit information, a current computer Meteorological (MET) message, observer information, target/known point information, a Battery Computer System (BCS) operator, and the references.

STANDARD(S): Per the references, ensuring the recording of the updated data base.

PERFORMANCE STEPS:

1. Monitor power-up procedures.
2. Verify the loading of the PLU and the performance of diagnostic tests, if applicable.
3. Verify the loading of a previously recorded data base.

- 4. Verify the update of linked formats, as required.
- 5. Verify the update of other data base information, as required.
- 6. Verify the recording of the updated data base.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
 - 2. TM 11-7440-283-12-1-1, Operator’s Manual, Computer Group, Gun Direction
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TASK: 0848.02.04 (CORE) SUPERVISE THE SHUT-DOWN OF THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a previously constructed data base, established communications with other digital devices, a BCS operator, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure the appropriate subscribers have been notified of pending departure from the net.
- 2. Ensure the firing element has been notified of the cessation of digital communications.
- 3. Ensure a data base recording is made.
- 4. Verify the entries in the status field in the appropriate format.
- 5. Verify the switching of the power switch on the PDU to OFF.
- 6. Verify the switching of the power switch on the Battery Computer System (BCU) to OFF.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. ST 6-40-2, Battery Computer System BCS Job Aids
 - 2. TM 11-7440-283-12-1-1, Operator’s Manual, Computer Group, Gun Direction
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DUTY AREA 03 - BATTERY COMPUTER SYSTEM (BCS) COMMUNICATIONS AND ERROR MESSAGES

TASK: 0848.03.01 (CORE) SUPERVISE ESTABLISHMENT OF COMMUNICATIONS WITH THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with Battery Computer System (BCS), operations order, situation map, commander’s guidance, a previously recorded data base, a BCS operator, a requirement to establish communications with the BCS, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify all appropriate entries are made in applicable communication formats and fields.
- 2. Verify communications equipment has appropriate settings.
- 3. Direct and verify the establishment of voice communications.
- 4. Verify the establishment of voice communications.

5. Direct digital communications check.
6. Verify establishment of digital communication.
7. Verify the establishment of communications with subscribers, as required.
8. Direct troubleshooting of communications, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.2, MCFSS Techniques and Procedures
 2. ST 6-40-2, Battery Computer System BCS Job Aids
 3. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.03.02 (CORE) SUPERVISE THE PROCESSING OF PLAIN TEXT INFORMATION USING THE SYS;PTM MESSAGE OF THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given an operational Battery Computer System (BCS) with a recorded data base, the requirement to process a plain text message, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise the processing of a SYS;PTM.
2. Supervise the transmission of a SYS;PTM.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
 2. TM 11-7440-283-12-1-1, Operator's Manual, Computer Group, Gun Direction
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TASK: 0848.03.03 (CORE) SUPERVISE THE PROCESSING OF DIGITAL COMMUNICATION MESSAGE FORMAT USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with Battery Computer System (BCS), operations order, situation map, commander's guidance, a previously recorded data base, appropriate communications equipment, a BCS operator, the requirement to process a digital communication message format, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Direct the transmission of and receipt of a digital communication message format.
2. Supervise the appropriate action for a received digital communications message format.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.2, MCFSS Techniques and Procedures
 2. ST 6-40-2, Battery Computer System BCS Job Aids
 3. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.03.04 (CORE) DIRECT CORRECTIVE ACTION ON ERROR AND WARNING MESSAGES USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Battery Computer System (BCS) with a recorded data base, an error or warning message(s) on the BCS display, a BCS operator, and the references.

STANDARD(S): Per the references, ensuring corrective action has been initiated.

PERFORMANCE STEPS:

1. Direct corrective action on error messages.
2. Direct corrective action on warning messages.
3. Direct corrective action on system warnings.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-2, Battery Computer System BCS Job Aids
 2. TM 11-7440-283-12-1-1, Operator's Manual, Computer Group, Gun Direction
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DUTY AREA 04 - BATTERY COMPUTER SYSTEM (BCS) FIRE MISSION PROCESSING

TASK: 0848.04.01 (CORE) SUPERVISE THE PROCESSING OF FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a BCS operator, a Call For Fire/battalion fire order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire/battalion fire order and ensure its accuracy and completeness.
2. Verify the target is plotted and ensure appropriate clearance is obtained, if required.
3. Determine and issue the battery fire order.
4. Verify the conduct of the mission in accordance with the fire order.
 - a. Verify appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission, as required.
5. Process subsequent corrections/End Of Mission (EOM), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.2, MCFSS Techniques and Procedures
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 3. ST 6-40-2, Battery Computer System BCS Job Aids
 4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.04.02 (CORE) VERIFY REPLOT PROCEDURES WITH THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, an active fire mission with a request to end the mission and record as target, a situation requiring replot to be performed, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Review the request for replot.
2. Direct the processing of refinement data, if applicable.
3. Direct the Fire Direction Center (FDC) to conduct replot.
4. Verify the entry of appropriate information.
5. Verify the target is reprocessed until the target altitude is within tolerance.
6. Verify the recording of the target/known point.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
2. ST 6-40-2, Battery Computer System BCS Job Aids
3. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0848.04.03 (CORE) SUPERVISE THE PROCESSING OF A CHECK FIRING AND CANCEL CHECK FIRING COMMAND USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a fire mission(s) in progress, the requirement to initiate and/or cancel check firing, and the references.

STANDARD(S): Per the references, including processing of both a remote and local check firing and/or cancel check firing command.

PERFORMANCE STEPS:

1. Direct and verify the operator initiates check firing upon receipt of any check firing message.
2. Verify the Battery Computer System (BCS) operator initiates check firing upon receipt of any check firing message.
3. Direct and verify the operator cancels check firing upon receipt of verified cancel check firing message.
4. Verify the operator cancels check firing upon the receipt of verified cancel check firing message.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
3. ST 6-40-2, Battery Computer System BCS Job Aids

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4. TB11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

TASK: 0848.04.04 (CORE) SUPERVISE THE PROCESSING OF A FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander’s guidance, operational BCS with a previously recorded data base, communications with a higher headquarters, a fire plan in the input queue or written on DA Form 4656-R target list worksheet/scheduling worksheet, the requirement to process the fire plan, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Direct the processing of the fire plan using the Battery Computer System (BCS).
2. Direct mass fire plan entry or the entry of targets into the fire plan using manual keying.
3. Direct editing of targets within the fire plan.
4. Direct the setting of H-Hour, as required.
5. Direct the computation of firing commands and firing data for the fire plan to ensure proper technical solution of firing data and coordination of the fire plan targets.
6. Direct the updating of the fire plan.
7. Direct the rehearsal of the fire plan, based upon Mission, Enemy, Terrain, Troops available-Time (METT-T).
8. Direct and supervise the execution of the fire plan.
9. Supervise the execution of the fire plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 3. ST 6-40-2, Battery Computer System BCS Job Aids
 4. TB11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software
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TASK: 0848.04.05 (CORE) SUPERVISE THE FIRING OF A TARGET FROM THE FIRE PLAN USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with Battery Computer System (BCS), operations order, situation map, commander’s guidance, operational BCS with a previously recorded data base, communications, a fire plan in the BCS;FPSUM message, the requirement to fire a target from the fire plan, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify receipt of the command to fire a target from the fire plan for accuracy and completeness.
2. Verify the target is plotted, ensuring appropriate clearance is obtained, if required.
3. Determine and issue the battery fire order in accordance with unit Standing Operating Procedures (SOP) and current operations order.

4. Issue the battery fire order in accordance with unit Standing Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission in accordance with the fire order.
- a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission message, as appropriate.
6. Process subsequent corrections/End Of Mission (EOM), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
2. ST 6-40-2, Battery Computer System BCS Job Aids
3. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0848.04.06 (CORE) SUPERVISE THE RECORDING OF PREVIOUSLY STORED TARGETS IN THE BCS;TKPSUM MESSAGE AS KNOWN POINTS, USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, targets stored in the BCS;TKPSUM message, the requirement to assign known point numbers to previously recorded targets and the references.

STANDARD(S): Per the references, verifying the recording.

PERFORMANCE STEPS:

1. Direct and verify the recording of previously stored targets as known points.
2. Verify the recording of previously stored targets as known points.
3. Direct the recording of the data base, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
3. ST 6-40-2, Battery Computer System BCS Job Aids
4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0848.04.07 (CORE) SUPERVISE THE PROCESSING OF ILLUMINATION FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a Call For Fire (CFF) for illumination (1 gun, 2 gun range or lateral spread, 4 gun range and lateral spread), a requirement to process the illumination mission, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire (CFF) for accuracy and completeness.
2. Verify the target is plotted, ensuring the appropriate clearance is obtained, if required.
3. Determine and issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
4. Issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission in accordance with fire order.
- a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
6. Be prepared to mark illumination, if requested.
7. Update initial fire order, based upon observer's change of method of engagement and/or method of fire and control.
8. Process subsequent corrections/End Of Mission (EOM), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 2. ST 6-40-2, Battery Computer System BCS Job Aids
 3. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.04.08 (CORE) SUPERVISE THE PROCESSING OF A COORDINATED ILLUMINATION FIRE MISSION USING BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a Call For Fire (CFF) for coordinated illumination or an illumination fire mission that yields a target and the observer requests coordinated illumination, a requirement to process the coordinated illumination mission, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire (CFF) for accuracy and completeness.
2. Verify the target plot and ensure clearance is obtained, if required.
3. Determine and issue the battery fire order in accordance with unit Standing Operating Procedures (SOP) and current operations order.
4. Issue the battery fire order in accordance with unit Standing Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).

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- c. Verify the transmission of fire mission messages, as appropriate.
6. Be prepared to mark illumination, if requested.
7. Ensure the time of opening fire of the lethal munitions is controlled, as appropriate.
8. Process subsequent corrections/End Of Mission (EOM), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
 2. ST 6-40-2, Battery Computer System BCS Job Aids
 3. TM 11-7440-283-12-1-1, Operator's Manual, Computer Group, Gun Direction
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DUTY AREA 05 - BATTERY COMPUTER SYSTEM (BCS) SPECIAL SITUATIONS

TASK: 0848.05.01 (CORE) SUPERVISE THE ESTABLISHMENT, PROCESSING, ENDING, AND DELETION OF COPPERHEAD PRIORITY FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with Battery Computer System (BCS); operations order; situation map; commander's guidance; operational BCS with a previously recorded data base; communications; a BCS operator; a request to establish, process, end, or delete a copperhead priority fire mission; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the request for establishment of a copperhead priority fire mission for accuracy and completeness.
2. Verify the target is plotted, ensuring appropriate clearance is obtained, if required.
3. Determine and issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
4. Issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
6. Verify the appropriate element of the firing unit is laid on the copperhead priority fire mission.
7. Direct the updating of the data base and firing data, as required.
8. Verify the updating of the data base and firing data, as required.
9. Direct/supervise/verify firing the copperhead priority mission remotely and locally, as directed.
10. Direct the ending and/or deletion of the copperhead priority fire mission, as required.

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- 11. Verify the ending and/or deletion of the copperhead priority fire mission, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCFSS SOP
 - 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 - 3. ST 6-40-2, Battery Computer System BCS Job Aids
 - 4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.05.02 (CORE) SUPERVISE THE ESTABLISHMENT, PROCESSING, AND DELETION OF A FINAL PROTECTIVE FIRE (FPF) MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS); operations order; situation map; commander's guidance; operational BCS with a previously recorded data base; communications; a BCS operator; a request to establish, process, end, or delete a final protective fire mission; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the receipt of the request for establishment of a final protective fire mission for accuracy and completeness.
- 2. Verify the target is plotted, ensuring appropriate clearance is obtained, if required.
- 3. Determine the battery fire order, in accordance with unit StandingOperating Procedures (SOP) and current operations order.
- 4. Issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
- 5. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
- 6. Verify the firing unit is laid on the final protective fire mission.
- 7. Direct the updating of the data base and firing data, as required.
- 8. Verify the updating of the data base and firing data, as required.
- 9. Direct/supervise/verify the firing of the final protective fire mission, as directed.
- 10. Direct the updating of the data base and firing data, as required.
- 11. Verify the updating of the data base and firing data, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCFSS SOP
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

3. ST 6-40-2, Battery Computer System BCS Job Aids
 4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.05.03 (CORE) SUPERVISE THE PROCESSING OF A QUICK SMOKE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS); operations order; situation map; commander's guidance; operational BCS with a previously recorded data base; communications; a Call For Fire (CFF) requesting quick smoke containing smoke screen length, maneuver target direction, wind direction in reference to the maneuver target line, screen time (duration), screen requirements, desired projectile type; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the request for quick smoke fire mission for accuracy and completeness.
2. Verify the target is plotted, ensuring appropriate clearance is obtained, if required.
3. Determine the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
4. Issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
6. Process subsequent corrections, as required.
7. Ensure sustaining volleys are fired, as appropriate.
8. Process End Of Mission (EOM), as appropriate.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 3. ST 6-40-2, Battery Computer System BCS Job Aids
 4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.05.04 (CORE) SUPERVISE THE PROCEDURES OF LASER FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a BCS operator, a laser mission Call For Fire (CFF), and the references.

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STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire (CFF) for accuracy and completeness.
2. Verify the target is plotted, ensuring appropriate clearance is obtained, if required.
3. Determine the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
4. Issue the battery fire order, in accordance with unit Standard Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
6. Process subsequent corrections/End Of Mission (EOM), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
3. ST 6-40-2, Battery Computer System BCS Job Aids
4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0848.05.05 (CORE) SUPERVISE THE DETERMINATION OF FIRING DATA AND PROCESSING FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a request for emplacement of a FASCAM minefield, the fire order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
2. Process subsequent corrections/End Of Mission (EOM), as required.
3. Determine the laid Family of Scatterable Mines (FASCAM) Safety Zone.
4. Transmit the laid Family of Scatterable Mines (FASCAM) Safety Zone to appropriate headquarters.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 3. ST 6-40-2, Battery Computer System BCS Job Aids
 4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.05.06 (CORE) SUPERVISE THE PROCESSING OF RADAR FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a BCS operator, a Call For Fire (CFF)/battalion fire order, a scenario requiring the fire mission to be observed by radar, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire (CFF) for accuracy and completeness.
2. Verify the target is plotted, ensuring appropriate clearance is obtained, if required.
3. Determine and issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
4. Issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the direction in the FM/CFF is 0000 mils grid.
 - c. Verify the manual determination of corrections from radar reported burst coordinates, as required.
 - d. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - e. Verify the transmission of fire mission messages, as appropriate, for the radar mission.
6. Process subsequent corrections/End Of Mission (EOM), as required, in accordance with unit Standing Operating Procedures (SOP) and the tactical situation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
 2. MCWP 3-16.2, MCFSS Techniques and Procedures
 3. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 4. ST 6-40-2, Battery Computer System BCS Job Aids
 5. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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11 Apr 00

TASK: 0848.05.07 (CORE) SUPERVISE THE PROCESSING OF AERIAL OBSERVER FIRE MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander’s guidance, operational BCS with a previously recorded data base, communications, a BCS operator, a Call For Fire (CFF) received from an aerial observer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the receipt of the call for fire for accuracy and completeness.
2. Verify the target is plotted, ensure appropriate clearance is obtained, if required.
3. Determine the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
4. Issue the battery fire order, in accordance with unit Standing Operating Procedures (SOP) and current operations order.
5. Verify the conduct of the mission, in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the observer direction/spotting line given in cardinal direction or degrees is converted to mils grid, if required.
 - c. Verify ranging rounds are fired, as required.
 - d. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - e. Verify the transmission of fire mission messages, as appropriate, for the aerial observer mission.
6. Process subsequent corrections/End Of Mission (EOM), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
2. MCWP 3-16.2, MCFSS Techniques and Procedures
3. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
4. ST 6-40-2, Battery Computer System BCS Job Aids
5. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

DUTY AREA 06 - BATTERY COMPUTER SYSTEM (BCS) REGISTRATIONS AND REGISTRATION CORRECTIONS

TASK: 0848.06.01 (CORE) DETERMINE APPROPRIATE ACTIONS TO IMPROVE THE ACCURACY OF FIRING DATA USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander’s guidance, operational BCS with a previously recorded data base, communications, a BCS operator, a scenario wherein the firing unit’s fires are inaccurate, and the references.

STANDARD(S): Per the references, improving accuracy.

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PERFORMANCE STEPS:

1. Identify the need to improve accuracy of firing data.
2. Determine exactly which requirement(s) is/are causing the inaccurate fire.
3. Determine what actions are required to improve accuracy, based on the tactical situation.
4. Apply appropriate actions to improve accuracy.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 3. ST 6-40-2, Battery Computer System BCS Job Aids
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TASK: 0848.06.02 (CORE) SUPERVISE THE PROCESSING OF A PRECISION REGISTRATION FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a BCS operator, a requirement to conduct a precision registration, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine a registration point, based upon the tactical situation.
 2. Issue the battery fire order.
 3. Verify the conduct of the mission, in accordance with the fire order.
- a. verify the appropriate entries are made in the appropriate message formats.
- b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
4. Verify the transmission of the Message To Observer (MTO) to conduct a precision registration.
 5. Verify the processing of the registration.
 6. Verify the determination and recording of the "did hit data".
 7. Verify the determination and validity of the AFU;REG message.
 8. Conduct verification mission.
 9. Bring back-up systems on line.
 10. Transfer AFU;REG message format, as required by unit Standing Operating Procedures (SOP), if all five requirements for accurate predicted fire are met.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

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- 3. ST 6-40-2, Battery Computer System BCS Job Aids
 - 4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software
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TASK: 0848.06.03 (CORE) SUPERVISE THE PROCESSING OF A HIGH BURST/MEAN-POINT-OF-IMPACT (HB/MPI)/LASER MEAN-POINT-OF-IMPACT/RADAR REGISTRATION FIRE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, communications, a requirement to conduct a High Burst/Mean-Point-Of-Impact/laser Mean- Point-Of-Impact/radar registration, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine an orienting point, based upon the tactical situation.
- 2. Issue the battery fire order.
- 3. Verify the conduct of the mission in accordance with the fire order.
 - a. Verify the appropriate entries are made in the appropriate message formats.
 - b. Verify the technical solution of firing data, in accordance with unit Standing Operating Procedures (SOP).
 - c. Verify the transmission of fire mission messages, as appropriate.
- 4. Verify the transmission of the Message To Observer (MTO) to conduct a High Burst (HB)/Mean-Point-of-Impact (MPI)/radar/laser registration.
- 5. Verify the processing of the registration.
- 6. Verify the determination and recording of "did hit data".
- 7. Verify the determination and validity of the AFU;REG message.
- 8. Conduct verification mission.
- 9. Bring back-up systems on line.
- 10. Transfer AFU;REG message format, as required, by unit Standing Operating Procedures (SOP), if all five requirements for accurate predicted fire are met.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCFSS SOP
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
- 3. ST 6-40-2, Battery Computer System BCS Job Aids
- 4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

ADMINISTRATIVE INSTRUCTIONS: This task covers registration for all appropriate projectile/fuze combinations, and includes all abbreviated forms of High Burst (HB)/Mean-Point-of-Impact (MPI) registration.

TASK: 0848.06.04 (CORE) SUPERVISE THE UPDATING OF THE AFU;REG MESSAGE FOR CONCURRENT NON STANDARD CONDITIONS

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, an AFU;REG on file from a previously fired registration, a BCS operator, appropriate non-standard conditions unknown at the time of the registration, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify "did hit data".
2. Verify the updating of the AFU;REG for weather, propellant temperature, projectile lot, projectile weight, as appropriate.
3. Verify the updating of the AFU;REG for firing unit survey, as required.
4. Verify the updating of the AFU;REG for registration point survey, as required.
5. Verify the updating of the AFU;REG for muzzle velocity variations, as required.
6. Verify validity of AFU;REG after each update.
7. Conduct verification mission.
8. Bring Back Up systems on line.
9. Transfer AFU;REG message, as appropriate.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCFSS SOP
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
3. ST 6-40-2, Battery Computer System BCS Job Aids
4. TB 11-7025-293-10-1, Operator's Manual, Cannon Battery Computer System Software

TASK: 0848.06.05 (CORE) SUPERVISE THE DETERMINATION OF A GRAPHICAL FIRING TABLE (GFT) SETTING AND TERRAIN GUN POSITION CORRECTIONS (TGPCS) USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander's guidance, operational BCS with a previously recorded data base, and the references.

STANDARD(S): Per the references, verifying the derivation of a Graphical Firing Table (GFT) setting and Terrain Gun Position Corrections (TGPC).

PERFORMANCE STEPS:

1. Verify the base piece location is added to the BCS OBS;SUM message.
2. Determine and announce all necessary information for processing the dry fire mission, based upon the tactical situation.
3. Direct the processing of the dry fire mission.
4. Direct the determination and construction of the Graphical Firing Table (GFT) setting.
5. Verify Graphical Firing Table (GFT) setting "did hit data" with Battery Computer System (BCS) dry fire mission.

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- 6. Direct the determination of Terrain Gun Position Corrections (TGPC) for converged sheaf, open sheaf, and special sheaf, as required.
- 7. Direct the determination and recording of Graphical Firing Table (GFT) settings and Terrain Gun Position Corrections (TGPC) for other sectors of fire, as appropriate.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
- 2. ST 6-40-2, Battery Computer System BCS Job Aids
- 3. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

ADMINISTRATIVE INSTRUCTIONS: This task includes determination of one plot, two plot, and multiplot Graphical Firing Table (GFT) settings, as appropriate.

TASK: 0848.06.06 (CORE PLUS) SUPERVISE THE LOCATING OF AN OBSERVER BY TRILATERATION, TRIANGULATION OR RESECTION, USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a Fire Direction Center (FDC) equipped with a Battery Computer System (BCS), operations order, situation map, commander’s guidance, operational BCS with a previously recorded data base, communications with an observer, a request to perform a self location technique, and the references.

STANDARD(S): Per the references, verifying the location.

PERFORMANCE STEPS:

- 1. Verify the request for self location for accuracy and completeness.
- 2. Verify the information and execution of the SPRT;LOC message.
- 3. Verify the plotting and labeling of the point on the firing chart and situation map, and ensure the appropriate entries are made in all back-up systems.
- 4. Verify transmission of the point location to all applicable agencies.
- 5. Direct and verify the recording of the data base, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCFSS SOP
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
- 3. ST 6-40-2, Battery Computer System BCS Job Aids
- 4. TB 11-7025-293-10-1, Operator’s Manual, Cannon Battery Computer System Software

DUTY AREA 07 - BACK-UP COMPUTER SYSTEM (BUCS) GENERAL

TASK: 0848.07.01 (CORE) SUPERVISE THE PREPARATION OF THE BACK-UP COMPUTER SYSTEM (BUCS) FOR OPERATION

CONDITION(S): Given BUCS SPECIAL components, a Back-Up Computer System (BUCS) operator, and the reference.

STANDARD(S): Per the reference, ensuring operability.

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PERFORMANCE STEPS:

1. Verify the set up and interface of BUCS SPECIAL equipment.
2. Verify the Thinkjet printer operational self-test.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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DUTY AREA 08 - BACK-UP COMPUTER SYSTEM (BUCS) INITIALIZATION AND DATABASE

TASK: 0848.08.01 (CORE) SUPERVISE THE INITIALIZATION OF THE BACK-UP COMPUTER SYSTEM (BUCS) AND THE CONSTRUCTION OF A DATA BASE

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with appropriate weapon-dependent modules and data base entered, a map of the operational area, firing element information, the XO's report, Meteorological (MET) data, observer information, target/known point information, a BUCS operator, and the references.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify the correct initialization procedure.
2. Verify the correct entry of the mapmod.
3. Verify the firing element and ammunition information.
4. Verify Meteorological (MET) data.
5. Verify observer information.
6. Verify target/known point information.
7. Verify known registration data.
8. Verify Back-Up Computer System (BUCS) residuals data.
9. Verify the Back-Up Computer System (BUCS) is brought "on line" with Battery Computer System (BCS).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0848.08.02 (CORE) SUPERVISE THE LOADING AND UPDATE OF A PREVIOUSLY ENTERED DATA BASE IN THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with a previously entered data base, current data base information, map of the operational area, an operations order, firing unit information, a current computer Meteorological (MET) message, observer information, target/known point information, a BUCS operator, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify power-up procedures.
2. Verify loading of previously entered data base.
3. Verify updating of all applicable files.

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INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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DUTY AREA 09 - BACK-UP COMPUTER SYSTEM (BUCS) FIRE MISSION PROCESSING

TASK: 0848.09.01 (CORE) SUPERVISE THE PROCESSING OF AN AREA FIRE MISSION USING BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS); a weapon dependent module for the desired weapon system in the computer; a data base entered; a blank DA Form 4504; the target location data by grid coordinates, shift from a known point, polar coordinates, or laser polar coordinates; a Call For Fire (adjust fire or Fire-For-Effect (FFE)), the subsequent corrections, a BUCS operator, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine the fire order.
2. Announce the fire order.
3. Direct the processing of the fire mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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DUTY AREA 10 - BACK-UP COMPUTER SYSTEM (BUCS) REGISTRATIONS AND REGISTRATION CORRECTIONS

TASK: 0848.10.01 (CORE) SUPERVISE THE PROCESSING OF A PRECISION REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the desired weapons dependent module activated in the computer, a data base entered, DA Form 4504, the target altitude, fire command standards, the observer direction and subsequent corrections, a BUCS operator, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Announce the battery fire order.
2. Verify the selection of the fire mission index for the precision registration.
3. Verify the recording of registration information on DA Form 4504.
4. Verify the processing of the impact phase, the determination of fire commands, and the computation of registration corrections (residuals).
5. Verify the processing of the time phase, the determination of fire commands, and the computation of registration corrections (residuals).
6. Verify the display and storage of corrections (residuals).
7. Verify processing of End Of Mission (EOM).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0848.10.02 (CORE) SUPERVISE THE PROCESSING OF A HIGH BURST(HB)/MEAN-POINT-OF-IMPACT (MPI)/RADAR REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the desired weapons dependent module activated in the computer, an entered data base, a fire order, High Burst (HB)/Mean-Point-of-Impact (MPI)/RADAR spottings, DA Form 4504, the target altitude, fire command standards, the observer direction and subsequent corrections, a BUCS operator, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select registration point.
2. Issue fire order.
3. Verify the transmission of the Message To Observer (MTO) to conduct the registration.
4. Verify the recording of registration information of DA Form 4504.
5. Verify the processing of the registration.
6. Verify the display and storage of corrections (residuals).
7. Verify processing of End Of Mission (EOM).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0848.10.03 (CORE) VERIFY THE CONCURRENT METEOROLOGICAL (MET) PROCEDURE USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the desired weapons dependent module activated in the computer, a constructed data base, a fire order from a BUCS registration, adjusted (did hit) data from the registration, BUCS residuals from that registration, data from a Meteorological (MET) message that was valid at time of registration input into the BUCS, a BUCS operator, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Supervise the input of Meteorological (MET) data.
2. Verify the updating of residuals.
3. Verify the accuracy of the Registration (REG) file.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0848.10.04 (CORE) VERIFY THE UPDATING OF REGISTRATION CORRECTIONS WITH SURVEY DATA USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the desired weapons dependent module activated in the computer, a data base constructed in the computer having a map spotted orienting station and lay data based on the grid azimuth method, a registration file (REG), previously fired registration data, updated location data provided by field artillery survey, BUCS residuals, and the reference.

Annex IX to
Appendix F to
ENCLOSURE (3)

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Supervise the input of survey data.
2. Verify the updating of residuals.
3. Verify the accuracy of the Registration (REG) file.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0848.10.05 (CORE) VERIFY THE COMPUTATION OF A BATTERY COMPUTER SYSTEM (BCS) TO BACK-UP COMPUTER SYSTEM (BUCS) RESIDUALS USING THE BUCS

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the desired weapons dependent module for the appropriate weather system activated in the computer, a data base entered, Battery Computer System (BCS) generated registration data, a fire order, target location information, a BUCS operator, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify storage of residuals based on Battery Computer System (BCS) data.
2. Direct processing of a check mission on known point used in the computation of the residuals.
3. Verify agreement of Back-Up Computer System (BUCS) and Battery Computer System (BCS) firing data to the known point.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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DUTY AREA 11 - BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL SITUATIONS

TASK: 0848.11.01 (CORE) SUPERVISE THE PROCESSING OF AN ILLUMINATION MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the desired weapons dependent module activated in the computer, a data base entered, communications, an illumination Call For Fire (CFF), subsequent corrections, a BUCS operator, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Issue fire order.
2. Verify entry of appropriate information based on fire order.
3. Verify transmission of related messages.
4. Verify the processing of subsequent corrections and End Of Mission (EOM), as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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TASK: 0848.11.02 (CORE) SUPERVISE THE PROCESSING OF A SMOKE MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given an operational Back-Up Computer System (BUCS) with the desired weapons dependent module activated in the computer, a data base to process a smoke mission, firing data, subsequent corrections, a BUCS operator, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the fire order.
2. Issue the fire order.
3. Verify the computation firing data and supervise the processing of the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 2. ST 6-40-31, Back-Up Computer System Job Aids--Cannon Application
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DUTY AREA 12 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) SUPERVISOR

TASK: 0848.12.01 (CORE PLUS) DIRECT THE ESTABLISHMENT OF A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a single station Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Configure a single workstation Operational Facility (OPFAC).
2. Power a single workstation Operational Facility (OPFAC).
3. Login at Defense Infrastructure Information Common Operating Environment (DII COE).
4. Start Advanced Field Artillery Tactical Data System (AFATDS).
5. Restore database.
6. Ensure validity of unit configuration window.
7. Replace default database.
8. Activate Operational Facility (OPFAC).
9. Configure printer.
10. Load V-MAP (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

Annex IX to
Appendix F to
ENCLOSURE (3)

- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.02 (CORE PLUS) DIRECT THE ESTABLISHMENT OF A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a multi-workstation Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Configure a multi-workstation Operational Facility (OPFAC).
- 2. Power a multi-workstation Operational Facility (OPFAC).
- 3. Change machine ID, if required.
- 4. Login at Defense Infrastructure Information Common Operating Environment (DII COE).
- 5. Start Advanced Field Artillery Tactical Data System (AFATDS) at master.
- 6. Enter multi-workstation Operational Facility (OPFAC) name.
- 7. Start Advanced Field Artillery Tactical Data System (AFATDS) at slave(s).
- 8. Enter multi-workstation Operational Facility (OPFAC) name at slave(s).
- 9. Restore database at the master.
- 10. Ensure validity of unit configuration window.
- 11. Replace default database.
- 12. Activate master workstation.
- 13. Configure printer(s).
- 14. Associate assignments to workstations.
- 15. Load V-Maps (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.03 (CORE PLUS) DIRECT EXIT PROCEDURES

CONDITION(S): Given a AFATDS OPFAC, operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Exit Advanced Field Artillery Tactical Data System (AFATDS) at specific workstations within an Operational Facility (OPFAC).

- 2. Exit Advanced Field Artillery Tactical Data System (AFATDS) for an entire Operational Facility (OPFAC).
- 3. Exit Advanced Field Artillery Tactical Data System (AFATDS) for an Operational Facility (OPFAC) at a specific time.
- 4. Exit a user account.
- 5. Shutdown hardware at an Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.04 (CORE PLUS) PLAN A COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine required connectivity.
- 2. Determine the required networks.
- 3. Check the routes, based on device limitations, and assign net setting parameters.
- 4. Check fire mission routes.
- 5. Assign addresses.
- 6. Build the enclosure to TAB J.
- 7. Determine the protocols to be used.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.05 (CORE PLUS) PLAN A DATA DISTRIBUTION SCHEME

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Decide what information is required.

- 2. Determine the routes for information.
- 3. Using the routes, determine what lists must exist.
- 4. Using the routes and lists, determine what criteria must exist.
- 5. Compare the requirements to the default data distribution.
- 6. Build additional lists to provide required distribution.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.06 (CORE PLUS) SUPERVISE THE ENTRY OF A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter configuration name.
- 2. Enter network parameters.
- 3. Enter destination stations.
- 4. Enter routing data.
- 5. Perform functions from the COMM Configuration Menu.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.07 (CORE PLUS) SUPERVISE THE IMPLEMENTATION OF A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC) with a planned communications configuration entered, operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Select the planned configuration as NEW CURRENT.
- 2. Associate channels to communication networks.
- 3. Turn on all nets.

- 4. Transmit test messages.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.08 (CORE PLUS) SUPERVISE THE ENTRY OF THE DISTRIBUTION DATA

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Assign units to distribution lists.
- 2. Enter distribution list criteria.
- 3. Execute distribution list functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.09 (CORE PLUS) SUPERVISE ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) DATABASE INPUT

CONDITION(S): Given a AFATDS OPFAC, operations order, SOP, tactical situation, geometry data, meteorological data, logistical data and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter unit data.
- 2. Enter geometry.
- 3. Enter meteorological data.
- 4. Enter unit logistical data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)

3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.10 (CORE PLUS) ESTABLISH TARGET GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander’s guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target selection standards.
- 2. Enter High Value Target (HVT) list data.
- 3. Enter Target Management Matrix (TMM) data.
- 4. Enter mission prioritization data.
- 5. Enter mission routing data.
- 6. Enter special target allocation data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.11 (CORE PLUS) ESTABLISH FIRE SUPPORT (FS) ATTACK GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Fire Support (FS) attack guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter air attack methods.
- 2. Enter Naval Surface Fire Support (NSFS) attack methods.
- 3. Enter mortar attack methods.
- 4. Enter mortar restrictions.
- 5. Enter mortar immediate attack methods.
- 6. Enter aviation attack methods.
- 7. Enter system attack perimeters.
- 8. Enter munitions restrictions.
- 9. Enter system tasks list data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.12 (CORE PLUS) ESTABLISH UNIT AND SENSOR GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Controlled Supply Rate (CSR) guidances.
- 2. Enter reporting guidances.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.13 (CORE PLUS) ESTABLISH FIELD ARTILLERY (FA) ATTACK GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Field Artillery (FA) attack guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Field Artillery (FA) preference table.
- 2. Enter Field Artillery (FA) cannon attack method.
- 3. Enter Field Artillery (FA) restriction.
- 4. Enter Field Artillery (FA) immediate attack method.
- 5. Enter rocket/missile attack methods.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.14 (CORE PLUS) ESTABLISH COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, C3 guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter meteorological guidance.
- 2. Enter movement guidance.
- 3. Enter survey guidance.
- 4. Enter Multiple Launch Rocket System (MLRS) guidance.
- 5. Enter FDS guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.15 (CORE PLUS) ESTABLISH MISCELLANEOUS GUIDANCES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, miscellaneous guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Continuity of Operations (CONOPS) guidance.
- 2. Enter target decay time guidance.
- 3. Enter target duplication guidance.
- 4. Enter Fire Support (FS) system buffer distance guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.16 (CORE PLUS) DIRECT ESTABLISHMENT OF INTERVENTION POINT DATA

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter mission precedence criteria.
- 2. Enter battle area criteria.
- 3. Enter mission type criteria.
- 4. Enter target type criteria.

- 5. Enter target filter criteria.
- 6. Enter analysis result criteria.
- 7. Enter attack option criteria.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.17 (CORE PLUS) SUPERVISE TARGET REPORT PROCESSING

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target block number allocation.
- 2. Perform target file maintenance (target lists, duplicates, coordination).
- 3. Process target indicator data.
- 4. Process suspect target data.
- 5. Initiate a fire mission.
- 6. Perform target process functions (find target, fire target, cancel Record As Target (RAT), End Of Mission (EOM), checkfiring).
- 7. Enter ASR number block.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.18 (CORE PLUS) SUPERVISE FIRE REQUEST PROCESSING

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, fire request, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Perform fire mission file maintenance (active mission monitor, MFR monitor, active fire mission window, End Of Mission (EOM), Record As Target (RAT)).
- 2. Perform munition calculation procedures.
- 3. Reprocess a fire request.

- 4. Process a clearance request.
- 5. Process a coordination request.
- 6. Direct processing of missions requiring additional information.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.19 (CORE PLUS) DEVELOP A SCHEDULE OF FIRES

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, target list, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target groups.
- 2. Enter series.
- 3. Enter a fire plan.
- 4. Transmit a fire plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. SL-3 10103A, SL-3 MMS Expendables
- 4. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0848.12.20 (CORE PLUS) SUPERVISE THE IMPLEMENTATION OF A PLANNED SITUATION INTO CURRENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, plan, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Edit unit locations.
- 2. Edit the fire plan.
- 3. Recompute schedule of fires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.21 (CORE PLUS) PLAN UNIT MOVEMENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter movement guidance.
2. Enter movement factors.
3. Build a movement overlay.
4. Establish routes.
5. Establish a move.
6. Deconflict unit moves.
7. Request move approval.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.22 (CORE PLUS) PLAN CONTINUITY OF OPERATIONS (CONOPS)

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Continuity of Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter Continuity of Operations (CONOPS) guidance.
2. Transmit Continuity of Operations (CONOPS) guidance and associated BASIC/General Unit data.
3. Enable/disable MFR/Inactive target purge.
4. Update communication configuration.
5. Transmit Continuity of Operations (CONOPS) notification.
6. Activate backup Operational Facilities (OPFACs).
7. Activate satellite Operational Facilities (OPFACs).

- 8. Clear principle Operational Facility (OPFAC) mission interventions.
- 9. Transmit Continuity of Operations (CONOPS) ready message.
- 10. Activate Continuity of Operations (CONOPS) guidance.
- 11. Process Continuity of Operations (CONOPS) activation messages.
- 12. Transmit active target list to backup Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.23 (CORE PLUS) SUPERVISE CONTINUITY OF OPERATIONS (CONOPS) EXECUTION

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, Continuity of Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter CONOPS guidance.
- 2. Transmit CONOPS guidance and associated BASIC/General Unit data.
- 3. Enable/disable MFR/Inactive target purge.
- 4. Update communication configuration.
- 5. Transmit CONOPS notification.
- 6. Activate backup OPFACs.
- 7. Activate satellite OPFACs.
- 8. Clear principle OPFAC mission interventions.
- 9. Transmit CONOPS ready message.
- 10. Activate CONOPS guidance.
- 11. Process CONOPS activation messages.
- 12. Transmit active target list to backup OPFAC.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.24 (CORE PLUS) DIRECT THE CREATION OF A TRIGGER EVENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), Operations Order, commander’s guidance, a tripped trigger event, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Direct the establishment of a trigger event rule.
- 2. Direct the establishment of a trigger function.
- 3. Direct the establishment of a trigger event state.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0848.12.25 (CORE PLUS) DIRECT ACTIONS FOR A TRIPPED TRIGGER EVENT

CONDITION(S): Given an operational AFATDS Operational Facility (OPFAC), operations order, commander’s guidance, a tripped trigger event, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Direct the implementation of the prescribed actions.
- 2. Direct the actions on automatically generated functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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DUTY AREA 13 - SURVEY

TASK: 0848.13.01 (CORE) VERIFY MEASURE DISTANCES WITH THE DISTOMAT DI-3000

CONDITION(S): Given a tripod, T-2E with accessories, DI-3000 with accessories, a forward station with a prism, a recorder, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise setup, leveling, and plumbing of the tripod and theodolite.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. DI-3000 User’s Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.02 (CORE) VERIFY DI-3000 DISTOMAT/THEODOLITE PARALLELISM TEST AND ADJUSTMENT

CONDITION(S): Given a T-2E with accessories, a DI-3000 with accessories, a forward station with a prism at least 100 meters from the distomat, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the setup, level, and plumb of tripod and theodolite.
- 2. Supervise mounting of the distomat onto the theodolite, ensuring it is properly seated and fixed on its mount.
- 3. Verify pointing on the target with the theodolite.
- 4. Verify proper turn-on for the distomat and verify return signal strength.
- 5. Verify adjustment is necessary, and supervise the adjustment of the distomat to the strongest signal strength using the hex key and the two adjusting screws on the rear of the distomat.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. DI-3000 User’s Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.03 (CORE) SUPERVISE THE MEASURING OF A HORIZONTAL AND VERTICAL ANGLE WITH A T-2E THEODOLITE

CONDITION(S): Given a tripod, T-2E with accessories, a forward and rear station, a recorder, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise setup, leveling, and plumbing of the tripod and theodolite.
- 2. Supervise measurement of a horizontal and vertical angle.
- 3. Supervise march order of the theodolite and tripod.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. T-2E User’s Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: Set up the reflector on the forward station and measure the distance with the distomat at the occupied station. Show the Marine the survey stations.

TASK: 0848.13.04 (CORE) SUPERVISE OBSERVATIONS FOR THE ARTY ASTRO METHOD

CONDITION(S): Given a tripod, T-2E theodolite with accessories, an azimuth mark, an observable celestial body, a recorder, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the setup, level, and plumb of tripod and theodolite.
- 2. Supervise necessary measurements for the artillery astro method.
- 3. Supervise march order of the theodolite and tripod.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. T-2E User's Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.05 (CORE) SUPERVISE THEODOLITE TEST AND ADJUSTMENTS

CONDITION(S): Given a T-2E theodolite with accessories, a shaded area on firm ground and free of wind, a forward station at least 100 meters from the theodolite, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise plate level test and verify adjustment.
- 2. Supervise circular bubble test and adjust, if necessary.
- 3. Supervise optical plumb test and adjust, if necessary.
- 4. Supervise horizontal collimation (index error) test and adjust, if necessary.
- 5. Supervise vertical collimation (index error) test and adjust, if necessary.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. T-2E User's Manual
- 2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: Plan use of available time to prepare the platoon to accomplish the mission based on the commander’s intent. Ensure all weapons are provided proper first echelon maintenance in the time available.

TASK: 0848.13.06 (CORE) SUPERVISE THE MAINTENANCE ON A T-2E THEODOLITE

CONDITION(S): Given a T-2E theodolite with accessories, authorized cleaning agents, and the references.

STANDARD(S): Per the references, ensuring compliance with all appropriate maintenance schedules.

PERFORMANCE STEPS:

1. Supervise drying and cleaning of all painted surfaces.
2. Supervise the use of a camel hair brush and ensure all dust, sand, and other abrasives are removed from all glass surfaces.
3. Supervise the cleaning of all glass surfaces with lens paper.
4. Supervise the cleaning of all accessories.
5. Verify the storage case is clean and dry before returning the instrument to the case.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. T-2E User’s Manual
2. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0410, MIMMS (AIS)
2. 0414, Ground Maintenance Management Procedures for Supervisors
3. 0416, The Marine Corps Publications and Directives System
4. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

1. Set up: The forward and rear stations should be easily visible and at least 100 meters from the occupied station.
 2. During the evaluation: The evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder.
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TASK: 0848.13.07 (CORE) VERIFY THE RECORDED FIELD NOTES FOR A HORIZONTAL AND VERTICAL ANGLE

CONDITION(S): Given an instrument operator, all necessary stations, a straight edge, a pencil, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Review the recorded field notes.
2. Verify the accuracy of the recorded notes for a horizontal and vertical angle.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.7, TTP's for Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

1. Set up: The forward and rear stations should be easily visible and at least 100 meters from the occupied station.
2. During the evaluation: The evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder.

TASK: 0848.13.08 (CORE) VERIFY THE RECORDED FIELD NOTES FOR ASTRONOMIC OBSERVATIONS

CONDITION(S): Given an instrument operator, an azimuth mark, time accurate to one second, a straight edge, a pencil, a recorder's notebook, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Review the recorded field notes.
2. Verify the accuracy of the field notes for astronomic observation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. T-2E User's Manual
2. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

1. Set up: The azimuth mark should be easily visible and at least 100 meters from the occupied station.
 2. During the evaluation: the evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder. Observations can be made on the sun or a star.
- Safety: Ensure a prism or solar filter is available for observations on the sun.

TASK: 0848.13.09 (CORE) VERIFY THE RECORDED FIELD NOTES FOR THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given a Position and Azimuth Determining System (PADS) in a vehicle, a PADS operator/driver, marked stations, a 1:50,000 scale mapsheet, a trig list, a T-2E theodolite with accessories, a straight edge, a pencil, a recorder's notebook, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify record for initialization.
2. Verify record for an update.
3. Verify the record for a two position mark with a plumb bob.

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- 4. Verify record for a mark with a T-2E theodolite (Auto Reflection).
- 5. Verify record for an optical azimuth mark with a T-2E theodolite (Auto Reflection).
- 6. Verify record for an update with a T-2E theodolite (Auto Reflection).
- 7. Verify record updated data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS:

- 1. Set up: The azimuth mark should be easily visible and at least 100 meters from the occupied station.
 - 2. During the evaluation: The evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder. Observations can be made on the sun or a star.
- Safety: Ensure a prism or solar filter is available for observations on the sun.

TASK: 0848.13.10 (CORE) SUPERVISE THE COMPUTATIONS OF AZIMUTHS AND DISTANCES FROM COORDINATES

CONDITION(S): Given a survey computer system, proper forms, a trig list with the names of the stations, a check computer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure accuracy of the header information on the forms.
- 2. Ensure proper extraction of the coordinates of the stations from the trig list and recording of the coordinates on the forms.
- 3. Ensure accuracy of the computations with the survey computer system.
- 4. Ensure proper recording of the answers on the form.
- 5. Ensure verification of the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.7, TTP's for Marine Artillery Survey
- 2. ST 6-2-30, Field Artillery Survey, Backup Computer System (BUCS), Revision 1

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.11 (CORE) VERIFY THE CONVERSION AND TRANSFORMATION OF COORDINATES AND AZIMUTH

CONDITION(S): Given a survey computer system, proper forms, a trig list, the names of the stations, a check computer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Ensure accuracy of the header information on the forms.
2. Verify conversion of Universal Traverse Mercator (UTM) coordinates to geographic positions.
3. Verify conversion of geographic positions to Universal Traverse Mercator (UTM) coordinates.
4. Verify computation of Universal Traverse Mercator (UTM) zone to zone transformations of UTM coordinates and grid azimuths.
5. Verify the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. T-2E User's Manual
2. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

TASK: 0848.13.12 (CORE) SUPERVISE THE COMPUTATIONS OF UNIVERSAL TRAVERSE MERCATOR (UTM) CONVERGENCE

CONDITION(S): Given a survey computer system, proper forms, a trig list with the name of the station, a true azimuth, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure accuracy of the header information on the form.
2. Ensure proper extraction of the position of the station from the trig list.
3. Ensure accuracy of the computation of the grid convergence and grid azimuth.
4. Ensure verification of the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: The evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder.

TASK: 0848.13.13 (CORE) VERIFY TRIG TRAVERSE COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder's notebook, proper forms, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure proper filling out of the header information on the form.
2. Ensure proper extraction of the field data from the recorder's notebook and recording of the data on the forms.

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- 3. Verify computation of the mean distances and comparative accuracy.
- 4. Ensure accuracy of the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: The evaluator must ensure proper procedures are used for announcing readings and all readings are read back by the recorder.

TASK: 0848.13.14 (CORE) VERIFY TRAVERSE COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder’s notebook, proper forms, a trig list, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Ensure accuracy of the header information on the forms.
- 2. Ensure proper extraction of the starting and ending coordinates from the trig list and recording of the data on the forms.
- 3. Ensure proper extraction of the field data from the recorder’s notebook and recording of the data on the forms.
- 4. Ensure accurate computation of the traverse.
- 5. Verify computation of closing data.
- 6. Ensure proper adjustment of the traverse (4th Order only).
- 7. Ensure accuracy of all computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.15 (CORE) VERIFY COMPUTATIONS OF ASTRONOMIC OBSERVATIONS

CONDITION(S): Given a survey computer system, a completed field recorder’s notebook, proper forms, a trig list, a check computer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure accuracy of the header information on the forms.
- 2. Ensure proper extraction of positions from the trig list and recording of the data on the form.
- 3. Ensure accurate extraction of the field data from the recorder’s notebook and recording of the data on the forms.

4. Ensure accurate extraction of the necessary data from FM-6-300 Army Ephemeris and recording of the data on the forms.
5. Ensure accurate computation of a grid azimuth using the artillery astro method.
6. Ensure accuracy of all computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. Computer System's User Manual
2. MCRP 3-16.1B, Army Ephemeris
3. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0848.13.16 (CORE) VERIFY INTERSECTION COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder's notebook, proper forms, a trig list, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure proper header information on the forms.
2. Ensure proper extraction of positions from the trig list and recording of the data on the form.
3. Ensure accurate extraction of the field data from the recorder's notebook and recording of the data on the forms.
4. Ensure accurate computation of the intersection.
5. Ensure accuracy of the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0848.13.17 (CORE) VERIFY THREE POINT RESECTION COMPUTATIONS

CONDITION(S): Given a survey computer system, a completed field recorder's notebook, proper forms, a trig list, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure accuracy of the header information on the forms.
2. Ensure proper extraction of positions from the trig list and recording of the data on the forms.
3. Ensure accurate extraction of the field data from the recorder's notebook and recording of data on the forms.

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- 4. Verify computation of the three point resection.
- 5. Ensure accurate computation of closing data.
- 6. Verify computation of the mean position and elevation.
- 7. Verify the computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
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TASK: 0848.13.18 (CORE) PERFORM DATUM TO DATUM TRANSFORMATION COMPUTATIONS

CONDITION(S): Given a survey computer system, a 1:50,000 scale mapsheet, proper forms, a trig list, a station name from the trig list, a datum not used on the mapsheet, a check computer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Fill out the header information on the forms.
- 2. Determine the datum used on the mapsheet.
- 3. Extract the position of the station from the trig list and enter the data on the forms.
- 4. Perform a datum to datum transformation from the map datum to the new datum using the programmed datums.
- 5. Perform a datum to datum transformation from the map datum using the new user defined option.
- 6. Verify all computations with the check computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
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TASK: 0848.13.19 (CORE) SUPERVISE THE SELECTION AND IDENTIFICATION OF STARS FOR ASTRONOMIC OBSERVATION

CONDITION(S): Given an outdoor scenario under a clear night sky, a world star chart, a star finder and identifier, DA Form 4175, geographic coordinates, Universal Traverse Mercator (UTM) coordinates, local date and time, time zone, a 1:50,000 scale mapsheet, a survey computer system, and the references.

STANDARD(S): Per the references, ensuring the stars selected for astronomic observation are selected utilizing DA Form 4175, the star finder identifier, and the survey computer system.

PERFORMANCE STEPS:

- 1. Ensure the proper selection of the preferred celestial body for observations, Polaris (Northern Hemisphere) or Alpha Acrux (Southern Hemisphere).

2. Supervise the selection and identification of stars with the star finder and identifier and DA Form 4175:

- a. Ensure proper selection/mounting of template for the star finder.
- b. Ensure proper construction of observation windows on the template.
- c. Ensure accurate orienting angle using DA Form 4175 or FM 6-300.
- d. Ensure proper orientation of the star identifier.

3. Supervise the selection and identification of stars with the star finder and identifier and a survey computer system.

- a. Ensure proper selection/ mounting of a template for the star identifier.
- b. Ensure proper construction of observation windows on the template.
- c. Ensure accurate determination of the ellipsoid and grid zone from the mapsheet.
- d. Ensure accurate determination of projected time and date of observation.
- e. Ensure the necessary data is entered into the survey computer system to determine the local sidereal time.
- f. Ensure accurate orientation of the star finder.
- e. Ensure appropriate stars are selected for the observations.
- h. Ensure selected star numbers are accurately entered into the survey computer system.
- i. Ensure proper identification of stars to be used for the observations.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCRP 3-16.1B, Army Ephemeris
- 2. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.20 (CORE) VERIFY THE INITIALIZATION OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given a Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a trig list, a 1:50,000 scale mapsheet, marked survey control stations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the Position and Azimuth Determining System (PADS) is located within 100 meters of a survey control point.
- 2. Verify pre-operation checks and services.
- 3. Verify breakers CB1 and CB2 turn on Position and Azimuth Determining System (PADS).
- 4. Verify Initialization of Position and Azimuth Determining System (PADS).
 - a. Verify extraction of ellipsoid and grid zone from the mapsheet.

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- b. Verify extraction of Universal Traverse Mercator (UTM) coordinates and elevation from the trig list.
- c. Verify data is read to the recorder and read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.21 (CORE) SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB OVER A SURVEY CONTROL POINT (SCP)

CONDITION(S): Given an initialized Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a trig list, a 1:50,000 scale mapsheet, marked survey control stations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure Position and Azimuth Determining System (PADS) is plumbed over the survey control point with the transmission in neutral and the parking brake applied.
- 2. Supervise update of the PADS.
 - a. Ensure proper extraction of Universal Traverse Mercator (UTM) grid zone, UTM coordinates, and elevation from the trig list.
 - b. Verify data is read to the recorder and read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.22 (CORE) SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE OVER A SURVEY CONTROL POINT (SCP) (AUTOREFLECTION)

CONDITION(S): Given an initialized Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, a trig list, a 1:50,000 scale mapsheet, marked survey control stations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the vehicle is located within 16 meters of the Survey Control Point (SCP).

2. Supervise set up, plumbing, and leveling the theodolite over the Survey Control Point (SCP).
3. Verify achievement of Auto Reflection, verifying the horizontal distance.
4. Verify update of the Position and Azimuth Determining System (PADS).
 - a. Supervise extraction of Universal Traverse Mercator (UTM) grid zone, UTM coordinates, and elevation from the trig list.
 - b. Verify data is read to the recorder and read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey
2. TM 5-6675-308-12, Operator's and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0848.13.23 (CORE) SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH PLUMB BOB OVER A STATION LOCATED BY GLOBAL POSITIONING SYSTEM (GPS)

CONDITION(S): Given an initialized Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, an AN/PSN-11 (PLGR), a 1:50,000 scale mapsheet, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the position with the PLGR per the following specifications:
 - a. Turn PLGR on.
 - b. Verify the PLGR has a valid cryptographic fill.
 - c. Place Setup Mode to CONT.
 - d. Verify Setup: Horizontal datum, Vertical datum, SV-Type All-Y.
 - e. Remain in CONT mode until FOM is 1.
 - f. Change Setup Mode to AVG.
 - g. Use Universal Traverse Mercator (UTM) coordinates from PLGR after 300 averages.
2. Verify the Position and Azimuth Determining System (PADS) is plumbed over the station with the transmission in neutral and parking brakes applied.
3. Verify update of the Position and Azimuth Determining System (PADS).
 - a. Supervise extraction of Universal Traverse Mercator (UTM) grid zone, UTM coordinates, and elevation from the trig list.
 - b. Verify read data to the recorder and verify the data read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey

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- 2. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11
- 3. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0848.13.24 (CORE) SUPERVISE THE PERFORMANCE OF A TWO POSITION MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, two marked stations, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the Position and Azimuth Determining System (PADS) is plumbed over the station with the transmission in neutral and the parking brake applied.
- 2. Supervise marking of the station.
- 3. Verify read data to the recorder and verify the data read back by the recorder prior to pressing the ENTER button.
- 4. Verify the Position and Azimuth Determining System (PADS) is plumbed over the second station with the transmission in neutral and the parking brake applied.
- 5. Supervise marking of the station.
- 6. Verify read data to the recorder and verify the data read back by the recorder prior to pressing the ENTER button.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.25 (CORE) SUPERVISE THE PERFORMANCE OF A MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, a marked station, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the vehicle is located within 16 meters of the station.
- 2. Supervise set up, plumbing, and leveling of the theodolite over the station.
- 3. Verify autoreflection, and verify the horizontal distance.

4. Supervise marking of the station.
5. Verify read data to the recorder and verify the data read back by the recorder.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey
2. TM 5-6675-308-12, Operator's and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0848.13.26 (CORE) SUPERVISE THE PERFORMANCE OF AN OPTICAL AZIMUTH MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, a T-2E theodolite with accessories, a marked station, an azimuth mark with a tripod and target set, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the vehicle is located within 16 meters of the station.
2. Supervise set up, plumbing, and leveling of the theodolite over the station.
3. Verify autoreflexion, horizontal angle, and the horizontal distance.
4. Supervise marking of the station.
5. Verify data read to the recorder and the data read back by the recorder.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.1A, Field Artillery Survey
2. TM 5-6675-308-12, Operator's and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0848.13.27 (CORE) SUPERVISE THE EXTRACTION OF ADJUSTED DATA FROM THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given an updated Position and Azimuth Determining System (PADS) in a vehicle, a recorder/driver, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify determination of the identification numbers of the stations between the last two updates.
2. Verify displayed adjusted Universal Traverse Mercator (UTM) Easting, Northing, and the elevation of each ID number.
3. Verify data read to the recorder and the data read back by the recorder.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.28 (CORE) SUPERVISE THE PERFORMANCE OF OPERATOR MAINTENANCE ON THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)

CONDITION(S): Given a Position and Azimuth Determining System (PADS) mounted in a vehicle, PADS accessories, an assistant operator, a Survey Control Point (SCP) and the reference.

STANDARD(S): Per the reference, ensuring all appropriate maintenance is performed.

PERFORMANCE STEPS:

- 1. Supervise before-operation checks and services.
- 2. Supervise during-operation check and services.
- 3. Supervise after-operation checks and services.
- 4. Supervise monthly checks and services.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 5-6675-308-12, Operator’s and Organizational Maintenance Manual for Position and Azimuth Determining System, AN/USQ-70

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System
- 4. 0813, Field Artillery Survey

TASK: 0848.13.29 (CORE) SUPERVISE THE CONVERSION TO COMMON CONTROL PROCEDURES

CONDITION(S): Given a completed field recorder’s notebook and computations from a battalion traverse; higher echelon coordinates, azimuth, and elevation; a survey computer system with a power source; and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the difference between higher and lower echelon azimuth.
- 2. Verify the radial error between higher and lower echelon positions.
- 3. Verify the difference between higher and lower echelon elevation.
- 4. Verify determination for the need to convert to common control using the "2, 10, 2" rule.
- 5. Verify conversion of the lower echelon survey data to common control.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
-

TASK: 0848.13.30 (CORE) SUPERVISE THE MARKING OF SURVEY STATIONS

CONDITION(S): Given an artillery firing position, a yellow witness stake and a red and yellow witness stake, wooden hubs, a hammer, flagging, survey tags, a survey team, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Supervise emplacement of wooden hubs at the Orienting Station (OS) and End of Orienting Line (EOL) locations, as positioned by the survey party chief.
- 2. Supervise witnessing of the Orienting Station (OS) with a yellow witness stake inclined 45 degrees towards the End of Orienting Line (EOL).
- 3. Supervise witnessing of the End of Orienting Line (EOL) with a red and yellow witness stake inclined 45 degrees towards the Orienting Station (OS).
- 4. Supervise filling out of tags in accordance with local Standing Operating Procedures (SOP) and verify tag attachment to the hubs and to the witness stakes.
- 5. Supervise flagging of the hubs and witness stakes, as necessary.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S): (NONE)

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey
-

TASK: 0848.13.31 (CORE) SUPERVISE THE DECLINATION OF AN M2A2 AIMING CIRCLE

CONDITION(S): Given an M2A2 aiming circle with accessories, a declination station, a trig list page for that declination station, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure proper setup, plumbing, and leveling of the M2A2 aiming circle.
- 2. Ensure the grid azimuth is set to azimuth mark 1 on the scale with the recording motion.
- 3. Ensure proper sighting in on azimuth mark 1 with the non-recording motion.
- 4. Ensure the telescope is oriented towards North with the recording motion and verify unlocking of the magnetic needle.
- 5. Supervise centering of the magnetic needle in the window with the recording motion; then verify locking of the magnetic needle.
- 6. Supervise recording the grid azimuth to magnetic North (grid declination).
- 7. Supervise the performing of STEPS 2-6 over all azimuth marks listed on the trig list page.

- 8. Verify meaning of the grid declinations from each azimuth mark and verify recording of the mean.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.1A, Field Artillery Survey
- 2. TM 9-1290-262-10, Operator’s Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

ADMINISTRATIVE INSTRUCTIONS: Prior to performing this evaluation, the declination station should be inspected for visibility to the azimuth marks and any necessary clearing should be performed.

TASK: 0848.13.32 (CORE) VERIFY THE DETERMINATION OF A GRID AZIMUTH WITH A DECLINATED M2A2 AIMING CIRCLE

CONDITION(S): Given a declinated M2A2 aiming circle with accessories, a marked station, an azimuth mark, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify setup, plumbing, and leveling of the M2A2 aiming circle over the station.
- 2. Verify setting the grid declination on the scale with the recording motion.
- 3. Verify orienting the telescope towards North with the non-recording motion and verify unlocking of the magnetic needle.
- 4. Verify centering the magnetic needle in the window with the non-recording motion and locking the magnetic needle.
- 5. Verify sighting on the azimuth mark with the recording motion.
- 6. Verify recording the grid azimuth.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. TM 9-1290-262-10, Operator’s Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.33 (CORE) SUPERVISE THE PERFORMANCE OF CRATER ANALYSIS WITH AN M2A2 AIMING CIRCLE

CONDITION(S): Given a declinated M2A2 aiming circle with accessories, an AN/PSN-11 (PLGR), a crater, string, hubs, hammer, and the references.

STANDARD(S): Per the references, ensuring an accurate determination of the position of the crater and the grid azimuth to the firing unit.

PERFORMANCE STEPS:

- 1. Ensure crater analysis is accomplished using the following methods:
 - a. Fuze Furrow and Center of Crater method.

- b. Side Spray method.
- c. Ricochet Furrow method.
- d. Main Axis method.
- e. Splinter Groove method.
- f. Fuze Tunnel method.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. MCWP 3-16.3, Field Artillery Cannon Battery
- 3. TM 9-1290-262-10, Operator's Manual for M2A2 Aiming Circle

TASK: 0848.13.34 (CORE) SUPERVISE THE PERFORMANCE OF SHELL FRAGMENT ANALYSIS

CONDITION(S): Given a curvature template, a boxwood scale, tags, a crater analysis report, a crater containing fragments, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise collection of usable shell fragments.
 - a. Verify type of shell (mortar, artillery, rocket).
 - b. (Low order burst or Dud) Ensure caliber of shell is determined using a curvature template.
 - c. (High order burst) Ensure a careful search for fragments of the fins, rotating band, gas check bands, fuzes, or large sections of the body. Ensure the caliber of shell is determined using a curvature template and the references.
- 2. Supervise tagging of usable fragments. Tags must include location of the crater, direction to the firing unit, and date-time group of shelling.
- 3. Verify completion of the crater analysis report.
- 4. Ensure the crater analysis report and tagged fragments are sent to the S-2, via proper channels.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: SSgt

REFERENCE(S):

- 1. Defense Intelligence Agency (DIA) Projectile Fragmentation Identification Guide
- 2. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 3. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

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TASK: 0848.13.35 (CORE) SUPERVISE THE PERFORMANCE OF OPERATOR’S MAINTENANCE ON AN M2A2 AIMING CIRCLE

CONDITION(S): Given an M2A2 aiming circle with accessories, BA-30 batteries, authorized cleaning materials, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify operator’s checks and services:
 - a. Verify micrometer knob adjustments, as necessary.
 - b. Verify level vial check.
 - c. Verify magnetic needle check.
 - d. Verify tilted reticle check.
 - e. Verify a vertical angle check.
2. Ensure all metal surfaces are wiped with a dry clean cloth.
3. Ensure all glass is cleaned with a camel hair brush and lens paper.
4. Ensure night lighting equipment is checked for operability.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. TM 9-1290-262-10, Operator’s Manual for M2A2 Aiming Circle

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey

TASK: 0848.13.36 (CORE) SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION

CONDITION(S): Given a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with a Fire Direction Center (FDC), pencil, paper, and the references.

STANDARD(S): Per the references, completing a call for fire within 60 seconds of target identification; announcing subsequent corrections within 15 seconds of round burst; expressing deviation to 10 meters, range to 100 meters, and Height of Burst (HOB) corrections to 5 meters; and entering the Fire for Effect (FFE) stage when burst is within 50 meters of the target.

PERFORMANCE STEPS:

1. Verify target location using grid, polar plot, or shift method.
2. Supervise transmission of the Call For Fire (CFF).
3. Supervise transmission of Observer Target (OT) direction with or before the first correction, if the target was located using the grid method.
4. Supervise transmission of subsequent corrections.
5. Supervise request for Fire For Effect (FFE).
6. Supervise transmission of refinement data (if any), Record As Target (RAT), End Of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

ADMINISTRATIVE INSTRUCTIONS: If probable error in range is greater than 38 meters, the observer may enter the Fire For Effect (FFE) stage when a 200 meter bracket is split.

TASK: 0848.13.37 (CORE) SUPERVISE THE CONDUCT OF AN IMMEDIATE SUPPRESSION MISSION

CONDITION(S): Given a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with a Fire Direction Center (FDC), pencil, and paper.

STANDARD(S): Per the references, ensuring the correct transmission of a Call For Fire (CFF) within 30 seconds of target identification and identifying initial target location to within 300 meters of the actual location.

PERFORMANCE STEPS:

- 1. Verify target location using grid, polar plot, or shift method.
- 2. Supervise transmission of the Call For Fire (CFF).
- 3. Supervise transmission of subsequent corrections within 15 seconds of round impact, if necessary.
- 4. Supervise transmission of refinement data (if any), Record As Target (RAT), End Of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0848.13.38 (CORE) SUPERVISE THE UPDATE OF THE EMPHEMERIS FILE IN GLOBAL POSITIONING SYSTEM (GPS) SURVEY

CONDITION(S): Given a 4000 MSGR receiver, Compact L1/L2 antenna, a computer with Trimble software (GPS Survey), Field Support Module, necessary cabling, and the reference.

STANDARD(S): Per the reference, ensuring successful download of the ephemeris file.

PERFORMANCE STEPS:

- 1. Verify setup of receiver, antenna, and logged data.
- 2. Supervise march order of receiver/antenna.

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3. Verify the download of raw ephemeris data to computer and ensure the ephemeris file is stored as CURRENT.EPH in the BIN directory.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.39 (CORE) SUPERVISE THE PRINTING OF GLOBAL POSITIONING SYSTEM (GPS) OBSERVATION WINDOWS USING PLANNING SOFTWARE

CONDITION(S): Given a computer with a current ephemeris, Global Positioning (GP) Survey software, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Supervise opening of GP-Survey software.
- 2. Verify selection of "Plan or Quick Plan", and establish date and area of observation.
- 3. Ensure the proper types of view graphs are selected for viewing.
- 4. Supervise viewing/printing of observation times and graphs.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.40 (CORE) SUPERVISE THE ESTABLISHMENT OF AN ABSOLUTE POINT

CONDITION(S): Given an operating area, a survey order, an MSGR receiver/antenna w/accessories, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Supervise setup and level of Geodetic L1/L2 antenna.
- 2. Supervise connection of antenna to MSGR receiver.
- 3. Verify power cable connection with the MSGR receiver.
- 4. Supervise powering up the MSGR receiver.
- 5. Supervise establishing of the absolute position, per the specifications of the survey order.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.41 (CORE) SUPERVISE THE PERFORMANCE OF A REAL TIME KINEMATIC/ON THE FLY (RTK/OTF) SURVEY

CONDITION(S): Given an operating area, a survey order, MSGR receivers/antennas w/accessories, SINCGARS radios and vehicles, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify antenna, radio, battery, and TDC2M connections.
- 2. Supervise powering up MSGR receiver and TDC2M.
- 3. Verify TDC2M configuration.
- 4. Verify signal reception.
- 5. Supervise establishment of Real Time Kinematic/On the Fly (RTK/OTF) reference station.
- 6. Supervise establishment of a Real Time Kinematic/On the Fly (RTK/OTF) rover station.
- 7. Supervise establishment of position and target area positions.
- 8. Supervise calibration operations over the Real Time Kinematic/On the Fly (RTK/OTF) network.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.42 (CORE) SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS WITH THE TDC2M

CONDITION(S): Given a TDC2M with a survey file, a map of the operational area, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Supervise opening of the job file in the TDC2M.
- 2. Supervise extraction of transformation data from surveyed datum to another datum.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 0813, Field Artillery Survey

TASK: 0848.13.43 (CORE) SUPERVISE THE PERFORMANCE OF A FAST STATIC, STATIC, AND KINEMATIC SURVEY

CONDITION(S): Given a survey order, an MSGR receiver with antenna and accessories, a vehicle, communications assets, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify location of station to be surveyed.
2. Supervise setup, plumbing, and leveling of the antenna.
3. Supervise starting of session in accordance with times listed in the survey order.
4. Supervise ending of session in accordance with the survey order.
5. Supervise march order of the equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0848.13.44 (CORE) SUPERVISE THE POSTING OF PROCESS DATA FROM A FAST STATIC, STATIC, AND KINEMATIC NETWORK SURVEY

CONDITION(S): Given a 4000 MSGR, Field Support Module, a computer configured with current Trimble software, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Supervise downloading of raw Global Positioning System (GPS) data from the MSGR.
2. Ensure proper check-in procedures of the raw Global Positioning System (GPS) data.
3. Verify network map.
4. Supervise printing of post-processed data logs.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
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TASK: 0848.13.45 (CORE) SUPERVISE THE ADJUSTMENT OF A FAST STATIC, STATIC, AND KINEMATIC SURVEY NETWORK

CONDITION(S): Given a computer, a post-processed fast static survey, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure Global Positioning System (GPS) adjustment software is entered properly.
2. Ensure the proper application of a Geoid Model to the adjustment.
3. Verify minimally constrained adjustment.
4. Verify a constrained adjustment.
5. Verify reports.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0848.13.46 (CORE) VERIFY THE DETERMINATION OF USER DEFINED DATA AND ELLIPSOID DATUM

CONDITION(S): Given a 1:50,000 scale map sheet, a list of organic fire support systems requiring ellipsoid/datum input, a list of survey assets requiring ellipsoid/datum input, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure proper determination of the ellipsoid and horizontal datum referenced to a mapsheet of the area of operations.
2. Ensure proper determination of the semi-major, semi-minor axis, flattening, and the inverse of flattening of the ellipsoid.
3. Verify listed ellipsoid/datum transformation parameters in the required format to the user.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCRP 3-16.1A, Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

1. 0813, Field Artillery Survey
-

TASK: 0848.13.47 (CORE) SUPERVISE RECONNAISSANCE FOR ARTILLERY UNITS

CONDITION(S): Given a brief by the S-3 and/or Battalion Survey Officer/Chief to a Survey Team Chief, supervise position area reconnaissance and/or route reconnaissance during combat operations.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify friendly and enemy situation.
2. Receive reconnaissance order.
3. Prepare survey equipment and materiel to extend survey and emplace appropriate markers in positions suitable for occupation.

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- 4. Conduct route reconnaissance.
- 5. Conduct position reconnaissance of areas specified in the reconnaissance order.
- 6. Visualize gun positioning to minimize site-to-crest / terrain masking as much as practicable.
- 7. Emplace survey markers, measure the average site-to-crest, and record it.
- 8. Conduct reconnaissance for supplementary and alternate positions as time permits.
- 9. Report any significant findings / deviations by the most direct means.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 6-20-1 (HTF), Field Artillery Cannon Battalion
- 2. MCWP 3-16.1, Marine Artillery Support
- 3. MCWP 3-16.7, TTP's for Marine Artillery Survey

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
- 2. 0332, Reconnaissance Marine
- 3. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

- 1. Chemical Warfare

DUTY AREA 14 - FIRING CHARTS

TASK: 0848.14.01 (CORE) PROVIDE REQUIRED DATA FOR THE CONSTRUCTION OF A SURVEYED FIRING CHART

CONDITION(S): Given a map portraying an area of operations and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine the azimuth of lay.
- 2. Determine the lower left-hand corner coordinates.
- 3. Provide the data to the chart operator.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.14.02 (CORE) VERIFY THE CONSTRUCTION OF SURVEYED FIRING CHARTS AND THE DETERMINATION OF CHART DATA

CONDITION(S): Given a prepared firing chart, Fire Direction Center (FDC) plotting equipment, known data, previously determined chart data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the construction of the firing chart.
- 2. Verify the determination of chart data.
- 3. Direct correction of errors.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0848.14.03 (CORE) VERIFY THE CONSTRUCTION OF AN EMERGENCY FIRING CHART

CONDITION(S): Given a prepared emergency firing chart, Fire Direction Center (FDC), plotting equipment, known data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the accuracy of the emergency firing chart.
- 2. Direct correction of errors.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0848.14.04 (CORE) SUPERVISE THE PREPARATION OF AN OBSERVED FIRING CHART

CONDITION(S): Given a grid sheet, the numbers for lower left-hand corner, an RDP, an aluminum plotting scale, plotting pins, 4H pencil, 6H pencil, red and blue pencils, a completed Record Of Fire (ROF) for a precision registration using emergency firing chart procedures, an estimated VI, an average angle of site from an XO's high burst, an adjusted azimuth of fire, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Select registration point.
- 2. Conduct precision registration.
- 3. Determine polar plot data.
- 4. Plot the firing unit location.
- 5. Construct the deflection index.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0848.14.05 (CORE) SUPERVISE THE TRANSFER OF DATA FROM A MAP SPOT OR OBSERVED FIRING CHART TO A SURVEYED FIRING CHART

CONDITION(S): Given a grid sheet, the numbers for lower left-hand corner, surveyed grid coordinates and altitudes of firing unit and registration point, the surveyed azimuth of lay, an RDP, an aluminum plotting scale, plotting pins, pencils (4H, 6H, and colored), the deflection and range to fire on targets, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Number grid sheet.
2. Plot and label firing unit.
3. Construct deflection index.
4. Plot and label registration point.
5. Polar plot previously fired on target.
6. Determine and announce range and deflection to the registration point.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 15 - MANUAL SITE

TASK: 0848.15.01 (CORE) VERIFY VERTICAL INTERVAL, ANGLE OF SITE, SITE, AND VERTICAL ANGLE

CONDITION(S): Given the altitude of the battery, an observer, a target, the chart range to the target, the Observer Target (OT) distance, the charge to be fired, a Graphical Site Table (GST), a Tabular Firing Table (TFT), a previously determined vertical interval, angle of site, site, vertical angle, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify the vertical interval.
2. Verify the angle of site.
3. Verify site.
4. Verify vertical angle.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 16 - MANUAL FIRE MISSION PROCESSING

TASK: 0848.16.01 (CORE) DETERMINE THE AMOUNT AND TYPE OF MUNITIONS NEEDED TO ACHIEVE SUPPRESSION, NEUTRALIZATION, AND DESTRUCTION OF TARGETS

CONDITION(S): Given a target description and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Extract the appropriate type and number of munitions from the Graphic Munitions Effects Table (GMET), based on the target.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. GMET, Graphical Munitions Effects Tables

TASK: 0848.16.02 (CORE) DETERMINE AND ANNOUNCE THE BATTERY FIRE ORDER

CONDITION(S): Given an operational Fire Direction Center (FDC); a Call For Fire (CFF); a target, to include type and location; a situation map; ammunition; units currently available to fire; munitions effects; the commander's guidance; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the battery fire order standards.
2. Determine the best method to attack the target and announce the fire order.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.16.03 (CORE) DETERMINE AND ANNOUNCE THE BATTALION FIRE ORDER

CONDITION(S): Given an operational Fire Direction Center (FDC); a Call For Fire (CFF); a target, to include the type and location; a situation map; ammunition; the units available to fire; commander's guidance; the munitions effects; and the reference.

STANDARD(S): The Marine must determine and announce the battalion fire order based on a CFF, per the reference.

PERFORMANCE STEPS:

1. Determine battalion fire order standards.
2. Determine the best method to attack the target and announce the fire order.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0848.16.04 (CORE) VERIFY THE MESSAGE TO OBSERVER (MTO)

CONDITION(S): Given the Call For Fire (CFF), fire order standards, unit target block, the unit call signs, and the references.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify the Message To Observer (MTO).
2. Direct corrective action on errors.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
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TASK: 0848.16.05 (CORE) SUPERVISE THE PROCESSING OF SIMULTANEOUS FIRE MISSIONS

CONDITION(S): Given a manually equipped Fire Direction Center (FDC), sufficient known data to process fire missions, and the reference.

STANDARD(S): Per the reference, ensuring proper processing of two simultaneous fire missions.

PERFORMANCE STEPS:

1. Ensure the missions are processed by target number.
2. Ensure the missions are properly processed by the chart operators.
3. Ensure the missions are properly processed by the computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.16.06 (CORE) APPLY VALUES FROM TABULAR FIRING TABLES (TFTS) AND ADDENDUMS

CONDITION(S): Given a Tabular Firing Tables (TFT) with all existing addendums and entry argument, the requirement to apply and use the values in the tables, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Select the appropriate Tabular Firing Table (TFT) or addendum.
2. Enter the appropriate table.
3. Enter the appropriate column.
4. Extract the data.
5. Explain how the data is used.
6. Apply the data to the required situation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. TFT's and Addendums
 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.16.07 (CORE) VERIFY FIRING DATA USING A GRAPHICAL FIRING TABLE (GFT) WITH OR WITHOUT A GFT SETTING APPLIED

CONDITION(S): Given a complete set of Graphical Firing Tables (GFTs) with or without a GFT setting applied, a chart range and deflection to the target, a charge to fire, site, the previously determined firing data, and the reference.

STANDARD(S): Per the reference, verifying the firing data for an HE projectile to within +/- 1 mil in elevation, +/- 0.1 fuze setting increments, and +/- 1 mil in deflection.

PERFORMANCE STEPS:

1. Select appropriate Graphical Firing Table (GFT) and charge.
2. Verify fuze setting, when applicable.
3. Verify deflection.
4. Verify quadrant.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.16.08 (CORE) VERIFY BATTERY FIRE COMMANDS

CONDITION(S): Given a fire order, firing data, fire command standards, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the fire commands.
- 2. Verify that fire commands are announced correctly.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.3, Field Artillery Cannon Battery
- 2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.16.09 (CORE) VERIFY THE PROCESSING OF A HIGH EXPLOSIVE (HE) FIRE MISSION (Q, TI, VT)

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate fire mission data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the receipt of the Call For Fire (CFF).
- 2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
- 3. Determine and issue the fire order.
- 4. Verify the processing of a fire mission for shell High Explosive (HE).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.16.10 (CORE) VERIFY THE PROCESSING OF A FIRE MISSION USING A NONSTANDARD WEIGHT PROJECTILE

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the receipt of the call for fire.
- 2. Verify that there is no violation of FSCMs.
- 3. Determine and issue the fire order.
- 4. Verify the processing of a fire mission using a non-standard weight projectile.

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INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.16.11 (CORE) CONSTRUCT A HIGH ANGLE GRAPHICAL FIRING TABLE (GFT) SETTING

CONDITION(S): Given a High Angle Graphical Firing Table (GFT), a High Angle GFT Setting, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Place the MHL over the adjusted elevation and construct a RANGE GAGELINE.

2. Record the Total Deflection Correction, and the Graphical Firing Table (GFT) Deflection Correction on the cursor.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.16.12 (CORE) DETERMINE FIRING DATA FROM A HIGH ANGLE GRAPHICAL FIRING TABLE (GFT) SETTING

CONDITION(S): Given a chart range, a high angle Graphical Firing Table (GFT), a GFT setting, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Place the RANGE GAGELINE over the chart range announced by the HCO and determine 100/R.

2. Determine elevation, 10 mil site factor, drift, and TOF from under the MHL.

3. Determine firing data to the target.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

ADMINISTRATIVE INSTRUCTIONS: Range and 100/R are read under the RANGE GAGELINE. All other values are read under the MHL.

TASK: 0848.16.13 (CORE) VERIFY THE PROCESSING OF A HIGH EXPLOSIVE (HE) HIGH ANGLE FIRE MISSION (Q & VT)

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate fire mission data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire (CFF).

2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).

3. Determine and issue the fire order.

- 4. Verify the processing of a fire mission for shell High Explosive (HE) high angle (Q & VT).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.16.14 (CORE) VERIFY THE PROCESSING OF AN ILLUMINATION (1 GUN, 2 GUN RANGE AND LATERAL SPREAD, AND COORDINATED ILLUMINATION) FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate illumination data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the receipt of the Call For Fire (CFF).
- 2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
- 3. Determine and issue the fire order.
- 4. Verify the processing of an illumination fire mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0848.16.15 (CORE) VERIFY THE PROCESSING OF AN IMMEDIATE SUPPRESSION/SMOKE FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate fire mission data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the receipt of the Call For Fire (CFF).
- 2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
- 3. Determine and issue the fire order.
- 4. Verify the accurate, complete processing of an immediate suppression/smoke fire mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0848.16.16 (CORE) VERIFY THE PROCESSING OF A SHELL DPICM FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate DPICM firing data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the receipt of the Call For Fire (CFF).

- 2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
- 3. Determine and issue the fire order.
- 4. Verify the processing of a fire mission for shell DPICM.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 17 - MANUAL REGISTRATIONS

TASK: 0848.17.01 (CORE) SUPERVISE THE PROCESSING OF A REGISTRATION AND THE APPLICATION OF A GRAPHICAL FIRING TABLE (GFT) SETTING AND TOTAL CORRECTIONS

CONDITION(S): Given a requirement to register, an operational Fire Direction Center (FDC), an observer, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
- 2. Issue the fire order.
- 3. Verify the comparison of initial chart data to adjusted data.
- 4. Verify the derived Graphical Firing Table (GFT) setting.
- 5. Verify the application of the Graphical Firing Table (GFT) setting to the GFT.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.17.02 (CORE) VERIFY THE TRANSFER AND/OR UPDATE OF A GRAPHICAL FIRING TABLE (GFT) SETTING

CONDITION(S): Given an operational Fire Direction Center (FDC), the requirement to transfer and/or update the Graphical Firing Table (GFT) setting, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Direct and verify the transfer of Graphical Firing Table (GFT) settings and deflection correction from an off-set registration.
- 2. Direct and verify the update of Graphical Firing Table (GFT) settings when transferring from map spot to surveyed firing chart.
- 3. Direct and verify the transfer of Graphical Firing Table (GFT) settings and deflection correction from registering unit to non-registering unit.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 18 - METEOROLOGICAL VALIDATION

TASK: 0848.18.01 (CORE) VERIFY THE METEOROLOGICAL (MET) MESSAGE

CONDITION(S): Given a Meteorological (MET) message and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the validity of the Meteorological (MET) message (concurrent).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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DUTY AREA 19 - MUZZLE VELOCITY

TASK: 0848.19.01 (CORE) VERIFY THE M94 VELOCIMETER DATA

CONDITION(S): Given an M94 velocimeter data and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the entries on the readout for completeness and proper procedures.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.19.02 (CORE) RECORD THE HISTORICAL MUZZLE VELOCITY (FIRST LOT CALIBRATION) AND INFER A SECOND LOT CALIBRATION USING THE MUZZLE VELOCITY RECORD (DA FORM 4982-R)

CONDITION(S): Given DA Form 4982-R, known data, first lot calibrated muzzle velocities for all the howitzers in the unit, a calibrated muzzle velocity for one howitzer with the second propellant lot, and the reference.

STANDARD(S): Per the reference, accurately determining the first lot Muzzle Velocity Variances (MVVs) to 0.1 m/s and inferring second lot MVVs and Muzzle Velocities (MVs) to the nearest 0.1 m/s.

PERFORMANCE STEPS:

- 1. Record the first lot known data and determine first lot Muzzle Velocity Variances (MVVs).
- 2. Record the second lot known data and determine the change in Muzzle Velocity Variances (MVVs) between the first and second lot calibrated muzzle velocities from the howitzer calibrating the second lot.
- 3. Determine inferred second lot Muzzle Velocity Variances (MVVs) and Muzzle Velocities (MVs) for all of the howitzers in the unit.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.19.03 (CORE) DETERMINE MUZZLE VELOCITY VARIANCES (MVVS) BASED ON SHOOTING STRENGTH AND PROPELLANT EFFICIENCIES

CONDITION(S): Given weapon data (Pullover reading and computed Effective Full Charges (EFCs)) for each howitzer in the Battery and the references.

STANDARD(S): Per the references, ensuring accuracy.

PERFORMANCE STEPS:

1. Obtain pullover gauge reading or computed Effective Full Charges (EFCs).
2. Determine howitzer shooting strength.
3. Obtain propellant lot efficiencies.
4. Compute Muzzle Velocity Variances (MVVs).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCTM 09814A-14&P, M94 Muzzle Velocity System
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 20 - MANUAL SPECIAL SITUATIONS

TASK: 0848.20.01 (CORE) SUPERVISE THE PROCESSING OF A QUICK SMOKE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate fire mission data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire (CFF).
2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
3. Determine and issue the fire order.
4. Verify the processing of the quick smoke fire mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.20.02 (CORE) SUPERVISE THE PROCESSING OF A SHELL ROCKET ASSISTED PROJECTILE (RAP) FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate Rocket Assisted Projectile (RAP) fire mission data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Verify the receipt of the Call For Fire (CFF).
2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
3. Determine and issue the fire order.
4. Verify the processing of the shell Rocket Assisted Projectile (RAP) fire mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.20.03 (CORE) SUPERVISE THE PROCESSING OF A COPPERHEAD FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate copperhead data, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the receipt of the Call For Fire (CFF).
- 2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
- 3. Determine and issue the fire order.
- 4. Verify the processing of the copperhead fire mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.20.04 (CORE) SUPERVISE THE PROCESSING OF A SWEEP AND ZONE FIRE MISSION

CONDITION(S): Given an operational Fire Direction Center (FDC), appropriate target information, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the receipt of the Call For Fire (CFF).
- 2. Verify there is no violation of Fire Support Coordination Measures (FSCMs).
- 3. Determine and issue the fire order.
- 4. Verify the processing of the sweep and zone fire mission.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.20.05 (CORE PLUS) ASSIST AN UNTRAINED OBSERVER WITH THE CONDUCT OF A FIRE MISSION

CONDITION(S): Given a situation in which an untrained observer has submitted a request for fire, a degree-mil conversion table, a situation map, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify the Call For Fire (CFF).
- 2. Obtain the target location and description.
- 3. Obtain the observer location.

- 4. Obtain sufficient information from the observer to allow an effective engagement of the target.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
-

TASK: 0848.20.06 (CORE) VERIFY REPLOT TARGETS AND REPLOT DATA (FZ QUICK AND VT)

CONDITION(S): Given the deflection, the Quadrant Elevation (QE) and total site fired, a Graphical Firing Table (GFT) with a GFT setting applied, the successive site determined by the chart operator, the target number, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine the replot deflection.
- 2. Determine the replot grid and altitude.
- 3. Determine the replot grid and altitude using fuze VT.
- 4. Determine refinement data (fuze time) with Height Of Burst (HOB) correction.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.20.07 (CORE) PROCESS A FIRE MISSION INTO A SECONDARY ZONE (ZONE TO ZONE TRANSFORMATION)

CONDITION(S): Given an operational Fire Direction Center (FDC), required plotting equipment, the firing unit in a primary (base) zone, fire mission request requiring fire across the Universal Traverse Mercator (UTM) zone junction, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Construct the firing chart.
- 2. Prepare the maps.
- 3. Process the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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DUTY AREA 21 - MANUAL SAFETY

TASK: 0848.21.01 (CORE) COMPUTE BASIC MANUAL SAFETY DATA FOR LOW AND HIGH ANGLE FIRE

CONDITION(S): Given the XO's report, appropriate Graphical Firing Table (GFT), Tabular Firing Table (TFT), and Graphical Site Table (GST), left and right limits for azimuth/deflection (each dog leg), min and max range (each dog leg), a current situation map, a firing chart, and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Compute left and right deflection limits for each dog leg.
2. Compute min and max QE for all shell fuze combinations for each dog leg.
3. Compute min fuze setting for all shell fuze combinations (if applicable) for each dog leg.
4. Apply safety data to situation map and firing charts.
5. Construct safety T's.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
3. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

ADMINISTRATIVE INSTRUCTIONS: Per JtRegtO 3570.1, this task is also an annual safety certification test requirement. Once certified, the Marine will actually perform this task more frequently. Prior to the conduct of any live fire training, safety data is always computed.

TASK: 0848.21.02 (CORE) COMPUTE EXECUTIVE OFFICER'S/POSITION MINIMUM QUADRANT ELEVATION (QE)

CONDITION(S): Given section chief's reports with angles of site to crest, piece to crest ranges, a map of the area, Rapid Fire Tables (RFT), the appropriate Tabular Firing Table (TFT), Graphical Site Table (GST), and Graphical Firing Table (GFT), and the references.

STANDARD(S): Per the references, accurately computing min QE for fuzes Quick, Time, Unarmed VT, and Armed VT.

PERFORMANCE STEPS:

1. Compute XO's min Quadrant Elevation (QE) manually (the sum of angles 1 - 5) for fuzes Quick, Time, and Unarmed VT.
2. Compute min safe arming time and XO's min Quadrant Elevation (QE) manually for Armed VT.
3. Compute XO's min Quadrant Elevation (QE) using the Rapid Fire Tables (RFTs) for fuzes Quick, Time, and Unarmed VT.
4. Compute min safe arming time and XO's min Quadrant Elevation (QE) using the Rapid Fire Tables (RFTs) for Armed VT.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
3. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

ADMINISTRATIVE INSTRUCTIONS: Per JtRegtO 3570.1, this task is also an annual safety certification test requirement. Once certified, the Marine will actually perform this task more frequently. Prior to the conduct of any live fire training, safety data is always computed.

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TASK: 0848.21.03 (CORE) UPDATE MANUAL SAFETY (LOW & HIGH ANGLE)

CONDITION(S): Given previously determined safety, total corrections from a registration, appropriate Graphical Firing Table (GFT), Tabular Firing Table (TFT), and Graphical Site Table (GST), a current situation map, a firing chart, and the references.

STANDARD(S): Per the references, maintaining currency.

PERFORMANCE STEPS:

1. Update left and right deflection limits for each dog leg.
2. Update min and max Quadrant Elevation (QE) for all shell fuze combinations for each dog leg.
3. Update min fuze setting for all shell fuze combinations, if applicable, for each dog leg.
4. Update safety data on situation map and firing charts.
5. Update safety Ts.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.3, Field Artillery Cannon Battery
2. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
3. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

ADMINISTRATIVE INSTRUCTIONS: Per JtRegtO 3570.1, this task is also an annual safety certification test requirement. Once certified, the Marine will actually perform this task more frequently. Prior to the conduct of any live fire training, safety data is always computed.

DUTY AREA 22 - CONVERSION FROM AUTOMATED TO MANUAL GUNNERY PROCEDURES

TASK: 0848.22.01 (CORE PLUS) ESTABLISH A MANUAL BACK-UP FOR AUTOMATED OPERATIONS

CONDITION(S): Given a Battery Computer System (BCS)/Back-Up Computer System (BUCS) primary Fire Direction Center (FDC) with a data base stored in the computer, a firing chart with plotting equipment, Graphical Firing Tables (GFTs), Tabular Firing Tables (TFTs), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select a base piece and determine battery center.
2. Construct a surveyed firing chart.
3. Determine and apply Graphical Firing Table (GFT) settings.
4. Determine comparative Velocity Errors (VEs).
5. Determine position constants.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

TASK: 0848.22.02 (CORE PLUS) CONVERT AN AUTOMATED MISSION IN PROGRESS TO MANUAL PROCEDURES

CONDITION(S): Given a Battery Computer System (BCS)/Backup Computer System (BUCS), primary Fire Direction Center (FDC), a firing chart with plotting equipment, Graphical Firing Tables (GFTs), Tabular Firing Tables (TFTs), a GFT setting, a fire mission in progress, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Alert the observer.
- 2. Determine site for the mission.
- 3. Determine the polar plot location of the target.
- 4. Prepare to process subsequent corrections.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery

DUTY AREA 23 - ALTERNATE MANUAL TECHNIQUES

TASK: 0848.23.01 (CORE PLUS) DETERMINE FIRING DATA USING EMERGENCY OBSERVER PROCEDURES (BLACK MAGIC)

CONDITION(S): Given a scenario wherein a Marine must convert the observer corrections into firing data without firing chart or firing tables, a weapons system, a map, a target, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine initial data.
- 2. Determine data for subsequent corrections.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. Battle Drill Guide (BDG) System Book Five A

ADMINISTRATIVE INSTRUCTIONS: Although this technique is infrequently used, it may be useful in some unique circumstances. Therefore, even though Enclosure (3) indicates this task should be trained to standard MOJT in the FMF, training on this task is strictly the commander's call. The MCI Battle Drill Guide Book 5A on Manual Gunnery Procedures has detailed steps on the proper procedures for task completion.

TASK: 0848.23.02 (CORE) DETERMINE RANGE K AND FUZE K

CONDITION(S): Given chart and adjusted data from a registration, a Tabular Firing Table (TFT), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine Range K.
- 2. Determine Fuze K.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. Battle Drill Guide (BDG) System Book Five A

ADMINISTRATIVE INSTRUCTIONS: Although this technique is infrequently used, it may be useful in some unique circumstances. Therefore, even though Enclosure (3) indicates this task should be trained to standard MOJT in the FMF, training on this task is strictly the commander’s call. The MCI Battle Drill Guide Book 5A on Manual Gunnery Procedures has detailed steps on the proper procedures for task completion.

DUTY AREA 24 - PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)

TASK: 0848.24.01 (CORE) SUPERVISE THE PERFORMANCE OF THE SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Ensure the display backlighting is adjusted.
- 2. Ensure proper display of the keypad map.
- 3. Ensure performance of the PLGR self-test.
- 4. Ensure selection of an operating mode and SV type.
- 5. Ensure proper setup of units of measurement.
- 6. Ensure proper selection of magnetic variation.
- 7. Ensure correct selection of elevation hold, time, and error formats.
- 8. Ensure proper selection of a horizontal datum.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0848.24.02 (CORE) SUPERVISE CHANGING THE MEMORY BATTERY FOR THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a DC power supply and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Ensure the appropriate battery is identified (memory battery vice a standard AA battery).
- 2. Explain the consequences of improperly changing the memory battery or of allowing the memory battery to die.
- 3. Ensure the appropriate procedures for changing the memory battery are employed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0848.24.03 (CORE) SUPERVISE THE PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE FOR THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Explain the purpose of performing an Emergency Zeroize.
- 2. Ensure the proper procedures for performing an Emergency Zeroize are employed.
- 3. State the data that will be lost by performing an Emergency Zeroize.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS:

- 1. Safety: The BA-5800 lithium battery is dangerous if mishandled.
- 2. The Marine is not required to perform the zeroize for evaluation purposes.

TASK: 0848.24.04 (CORE) SUPERVISE VERIFICATION OF ERRORS CAUSING AN/PSN-11 (PLGR) WARNING DISPLAYS

CONDITION(S): Given a PLGR with a power supply, PLGR error warning displays, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Ensure the following errors are properly identified and proper corrective action is initiated:
 - a. "Low Memory Battery".
 - b. "Low Primary Battery".
 - c. "External Power Lost".

- d. "External Antenna Lost".
- e. "External Antenna Fault".
- f. "Emergency Zeroize Passed".
- g. "Emergency Zeroize Failed".
- h. "Invalid Key Entered".
- i. "Bad Key Detected".
- j. "No Key For Tomorrow".
- k. "Not Enough Keys For Mis Dur".
- l. "Too Many Keys For Mis Dur".
- m. "Check GUV Issue Number".
- n. "Insufficient Y-code SVs".
- o. "Possible Spoofers".
- p. "Zeroized Failed".
- q. "All Keys Zeroized".

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0848.24.05 (CORE) SUPERVISE THE PERFORMANCE OF NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply, 1:50,000 scale mapsheet of the area, a trig list, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Ensure proper navigation to a location in the 2Dfast mode.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS:

1. Safety: The BA-5800 lithium battery is dangerous if mishandled.
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TASK: 0848.24.06 (CORE) VERIFY THE DETERMINATION OF A POSITION IN THE AVERAGING MODE WITH THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply, an area free of signal masks, a 1:50,000 scale mapsheet, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure proper turn on of the PLGR and completion of its turn-on sequence.
2. Ensure selection of the SETUP option on the MENU screens.
3. Ensure the SETUP mode is changed to CONT.
4. Verify the horizontal datum and vertical datum selected in the PLGR against the mapsheet.
5. Ensure the Almanac Age is current.
6. Verify the PLGR has a valid Cryptographic fill.
7. Remain in the CONT mode until FOM of ONE is obtained.
8. Ensure the SETUP mode is changed to AVG.
9. Allow the PLGR to record, ensuring the FOM remains ONE for the entire operation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

1. AN/PSN-11 PLGR Aid
2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0848.24.07 (CORE) SUPERVISE THE ENTRY OF A USER DEFINED DATUM IN THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply, a 1:50,000 scale mapsheet referenced to a horizontal datum not programmed in the PLGR, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Ensure proper determination of the horizontal datum from the mapsheet.
2. Ensure proper extraction of user defined data from the references.
3. Ensure proper turn on of the PLGR and completion of its turn-on sequence.
4. Ensure selection of the INIT option on the MENU screens.
5. Ensure proper entry of the user defined data on page four or five of the INIT displays.

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INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0848.24.08 (CORE) SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS WITH THE AN/PSN-11 (PLGR)

CONDITION(S): Given a PLGR with a power supply and one stored waypoint, a 1:50,000 scale mapsheet referenced to a PLGR programmed horizontal datum that is different than the datum of the stored waypoint, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Ensure proper turn-on of the PLGR and completion of its turn-on sequence.
- 2. Ensure selection of the EDIT menu of the WP menu.
- 3. Ensure proper change of the horizontal datum.
- 4. Ensure proper storage of the change.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

TASK: 0848.24.09 (CORE) SUPERVISE THE PERFORMANCE OF PLGR TO PLGR OPERATIONS

CONDITION(S): Given one PLGR with a power supply, a one day almanac, several stored waypoints, user defined datums, a lock on of at least one satellite, a second PLGR with a power supply, a PLGR to PLGR cable, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Ensure proper turn on of the PLGR and completion of its turn-on sequence.
- 2. Ensure both PLGRs have STANDARD selected for interface operations.
- 3. Ensure the DATA-XFER option is selected from the menu.
- 4. Ensure the PLGR to PLGR cable is properly attached to the J-2 (RS-232) port on each PLGR.
- 5. Ensure proper transfer of all data from one PLGR to the other.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

TASK: 0848.24.10 (CORE) VERIFY THE LOADING OF CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT WITH THE AN/PSN-11 (PLGR)

CONDITION(S): Given one PLGR with a power supply, an AN/CYZ-10, survey and ommunications equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify transfer of crypto variables to applicable communications equipment.
- 2. Verify transfer of accurate time to applicable communications equipment.
- 3. Verify transfer of crypto variables to applicable survey equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

DUTY AREA 25 - FAMILY OF SCATTERABLE MINES (FASCAM) PROCEDURES

TASK: 0848.25.01 (CORE) DETERMINE AIMPOINT LOCATION AND FIRING DATA FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING THE BATTERY COMPUTER SYSTEM (BCS)

CONDITION(S): Given a request for the emplacement of a Family of Scatterable Mines (FASCAM) minefield, a Battery Computer System (BCS), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine range to the center of the target.
- 2. Determine the battery-minefield angle.
- 3. Determine the most accurate method for determining data.
- 4. Enter the appropriate table and extract the number of aimpoints to be fired.
- 5. Determine the number of rounds to be fired.
- 6. Determine firing data for each piece to an aimpoint.
- 7. Issue fire commands.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.25.02 (CORE) DETERMINE AIMPOINT LOCATION AND FIRING DATA FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING THE BACKUP COMPUTER SYSTEM (BUCS)

CONDITION(S): Given a request for the emplacement of a Family of Scatterable Mines (FASCAM) minefield, a Backup Computer System (BUCS), and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine range to the center of the target.
- 2. Determine the battery-minefield angle.
- 3. Determine the most accurate method for determining data.
- 4. Enter the appropriate table and extract the number of aimpoints to be fired.
- 5. Determine the number of rounds to be fired.
- 6. Determine firing data for each piece to an aimpoint.
- 7. Issue fire commands.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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TASK: 0848.25.03 (CORE) DETERMINE AIMPOINT LOCATION AND FIRING DATA FOR THE FAMILY OF SCATTERABLE MINES (FASCAM) MINEFIELD USING MANUAL PROCEDURES

CONDITION(S): Given a request for the emplacement of a Family of Scatterable Mines (FASCAM) minefield, manual fire direction equipment, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine range to the center of the target.
- 2. Determine the battery-minefield angle.
- 3. Determine the appropriate table and extract the number of aimpoints to be fired.
- 4. Enter the appropriate table and extract the number of aimpoints to be fired.
- 5. Determine the number of rounds to be fired.
- 6. Determine firing data for each piece to an aimpoint.
- 7. Issue fire commands.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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DUTY AREA 26 - MANUAL FIRE PLANNING

TASK: 0848.26.01 (CORE PLUS) SUPERVISE THE MAINTENANCE OF A TACTICAL SITUATION MAP

CONDITION(S): Given a mounted map covered with acetate overlays, plotting equipment, grease pencils, a range fan, a list of current tactical information, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the plotting of boundaries, maneuver control points, and other maneuver control measures.
2. Verify the plotting of locations of all friendly units including target acquisition assets.
3. Verify the plotting of all Fire Support Coordination Measures (FSCMs).
4. Verify the plotting of targets.
5. Verify the plotting of enemy units.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 101-5-1, Operational Terms and Symbols
 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0848.26.02 (CORE PLUS) SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS

CONDITION(S): Given a list of targets, a target bulletin, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the recording of the lists of targets.
2. Verify the displaying of the targets on an overlay.
3. Resolve conflicts and duplications.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0848.26.03 (CORE PLUS) SUPERVISE THE PROCESSING OF A FIRE PLAN

CONDITION(S): Given a fire plan, DA Form 5368-R (Quick Fire Plan Form) or a Target List Worksheet/Scheduling Worksheet, and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Verify the recording of the fire plan.
2. Verify the computation of firing data.
3. Determine the schedule of fires.
4. Execute the fire plan.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 4. MCWP 3-16.4, Field Artillery Manual Cannon Gunnery
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DUTY AREA 27 - EMPLOYMENT OF RADAR SET AN/TPQ-46

TASK: 0848.27.01 (CORE) RECOMMEND PLANS, ORGANIZATION, AND EMPLOYMENT OF RADAR SET AN/TPQ-46

CONDITION(S): Given a tactical scenario, list of available radar assets, the commander's scheme of maneuver, and the reference.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Develop a plan for tactical employment of all radar assets in offensive operations.
2. Develop a plan for tactical employment of all radar assets in defensive operations.
3. Advise the supported unit commander/staff on the capabilities and limitations of the AN/TPQ-46.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
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TASK: 0848.27.02 (CORE) SELECT A SITE FOR THE RADAR SET AN/TPQ-46

CONDITION(S): Given a tactical scenario, general position area, area of search, map of the area, situation overlay, an aiming circle, pencil and paper, and the references.

STANDARD(S): Per the references, selecting both primary and alternate sites.

PERFORMANCE STEPS:

1. Perform map reconnaissance.
2. Conduct positioning analysis using Firefinder Position Analysis System (FFPAS).
3. Perform ground reconnaissance.
4. Conduct reconnaissance of all routes within the general position area.
5. Evaluate site requirements METT-TS-L, tactical, and technical considerations.

6. Coordinate communications and COMSEC requirements.
7. Coordinate security with adjacent units.
8. Coordinate administrative and logistical requirements.
9. Select primary/supplementary/alternate site(s), as required.
10. Coordinate or conduct survey operations.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
 2. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
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TASK: 0848.27.03 (CORE) SUPERVISE THE PREPARATION OF THE RADAR SET AN/TPQ-46 FOR MOVEMENT

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location, radar team personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise preparation for movement by truck.
 - a. Ensure antenna is properly stowed.
 - b. Ensure the antenna weather cover is properly installed.
 - c. Ensure system cables are properly stowed.
 - d. Ensure leveling jacks and jack pads are properly stowed.
 - e. Ensure ground rods and straps are properly stowed.
 - f. Ensure all trailer equipment is secure.
 - g. Check the system for loose items.
 - h. Ensure trailer is securely coupled to the truck.
2. Direct and supervise preparation for movement by helicopter.
 - a. Ensure all equipment inside shelter is secure.
 - b. Ensure shelter lift slings are properly installed.
 - c. Supervise the removal of the shelter from the truck.
 - d. Ensure all trailer equipment is secure.
 - e. Ensure trailer lift slings are properly installed.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. FM 55-450-1, Army Helicopter External Load Operations
 2. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
 3. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
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TASK: 0848.27.04 (CORE) SUPERVISE THE PREPARATION OF THE RADAR SET AN/TPQ-46 FOR OPERATION

CONDITION(S): Given a radar set AN/TPQ-46 emplaced in a field location, radar team personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise emplacement of radar set trailer.
 - a. Ensure the trailer is properly located over site stake.
 - b. Ensure the trailer is uncoupled from the prime mover.
 - c. Ensure the trailer is level.
 - d. Ensure the trailer is properly grounded.
 - e. Ensure the antenna cover is removed and stowed.
 - f. Ensure the antenna is erected and secure.
 - g. Ensure the trailer vent is open.
 - h. Ensure the primary power cable is laid and connected.
 - i. Ensure the antenna is properly boresighted.
2. Supervise the preparation of the S-250 Common Shelter for operations.
 - a. Ensure the system cables are laid and connected.
 - b. Ensure the shelter is properly grounded.
 - c. Ensure all vents are open.
 - d. Ensure the map is correctly installed in the line printer.
 - e. Ensure paper is loaded in the line printer.
3. Supervise startup procedures.
 - a. Ensure the power panel controls are set in NORMAL position.
 - b. Ensure the generator output voltage is correctly adjusted.
 - c. Ensure the program tape is installed in the magnetic tape unit.
 - d. Ensure the power is turned on.
 - e. Ensure the radio control switch is turned to SHELTER position.
 - f. Ensure communications are established.
4. Gather the following initialization data and record it on the Initialization Data Worksheet:
 - a. Site data.
 - b. Meteorological (MET) data.
 - c. Weapons Location Unit (WLU) map data.
 - d. Auto Height Correction (AHC) data.
 - e. Manual height data.
 - f. Search data.

- g. Communication data.
 - h. Adaption constants.
 - i. Manual terrain following data.
 - j. Censor and priority zone data.
5. Supervise initialization of radar set.
- a. Ensure the Cartridge/Printer Control (CPC), Central Processing Unit/Input Output Control (CPU/IOC), and memory tests are performed.
 - b. Ensure the initialization program is loaded and proper data is input.
 - c. Verify initialization data entries against printout.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
 - 2. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
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DUTY AREA 28 - OPERATIONS OF RADAR SET AN/TPQ-46

TASK: 0848.28.01 (CORE) SUPERVISE THE OPERATION OF THE RADAR SET AN/TPQ-46

CONDITION(S): Given a tactical scenario involving friendly fire and hostile modes, an AN/TPQ-46 in support of combat operations, radar team personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the input/deletion of priority and censor zones.
 - a. Ensure zone data messages are properly stored.
 - b. Ensure zones are entered and deleted correctly.
 - 1. Using keyboard.
 - 2. Using the B-scope.
 - 3. Using the site map.
- 2. Ensure the proper use of the following operational features:
 - a. Jam strobe.
 - b. Extended azimuth.
 - c. C function.
 - d. Video integration.
 - e. Pulsed interference rejection.
 - f. Auto censoring.
 - g. Location averaging.
 - h. Hostile impact prediction.
 - i. Flat mask angle.
 - j. Processed video.

- 3. Supervise operations in the hostile mode.
 - a. Ensure all hostile weapon locations are properly height corrected.
 - b. Ensure hostile weapon locations are properly stored in permanent memory.
 - c. Ensure hostile weapon locations are transmitted to the Target Processing Center (TPC) by voice or TACFIRE message.
 - d. Ensure search parameters, wind data, and communications data are properly updated, as required.
- 4. Supervise operations in the friendly fire mode.
 - a. Coordinate with the firing battery.
 - b. Ensure all friendly fire data is verified and entered correctly.
 - c. Ensure correct selection of friendly fire buffer.
 - d. Ensure detected friendly fire locations are properly displayed and height corrected.
 - e. Ensure registration of indirect fire elements are properly performed.
 - f. Ensure adjustments of indirect fire are properly performed.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
 - 2. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
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TASK: 0848.28.02 (CORE) SUPERVISE RADAR SHELTER VOICE AND DIGITAL COMMUNICATIONS

CONDITION(S): Given a tactical scenario requiring the construction / transmission / interpretation of digital messages, a radar set AN/TPQ-46 emplaced in a field location, radar team personnel, COMSEC and communications equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Coordinate and establish communications on the nets specified by the communications plan.
- 2. Supervise the construction and transmission of the following digital messages:
 - a. Priority target report - FM;RFAF.
 - b. Fire mission - FM;FOCMD.
 - c. Free text - SYS;PTM.
 - d. Registration report - FM;SUBS.
 - e. Radar ready - FM;SUBS.
 - f. Radar location - FM;OBCO.
 - g. Target report - ATI;CDR.
 - h. Communications test - MD;RCV5.
- 3. Supervise the interpretation of the following received digital messages:
 - a. Fire mission - FM;FMCOD.

- b. Free text - SYS;PTM.
- c. Radar ready/registration - FM;SUBS.
- d. Friendly fire target - FM;MTO.
- e. Friendly fire battery - FM;INTM.
- f. Radar location - FM;OBCO.
- g. MET data - MET;TA.
- h. Radar search area - SPRT;SEARCH.
- i. Priority/censor zone - SPRT;FILTER.
- j. Communications test - MD;XMT5.
- k. Acknowledgment/Negative Acknowledgment - ACK/NAK.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36

DISTANCE LEARNING PRODUCT(S):

- 1. 2515, Antenna Construction and Propagation of Radio Waves
- 2. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0848.28.03 (CORE) SUPERVISE OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON RADAR SET AN/TPQ-46

CONDITION(S): Given a radar set AN/TPQ-46, tools, cleaning equipment, radar team personnel, and the references.

STANDARD(S): Per the references, ensuring all required maintenance is conducted.

PERFORMANCE STEPS:

- 1. Schedule, conduct, and supervise Preventive Maintenance Checks and Services (PMCS) on the following:
 - a. Radar set trailer.
 - b. Communications equipment.
 - c. Generator set MEP-813A.
 - d. Vehicular assets.
- 2. Inspect the radar set, communications equipment, and generators to ensure Preventive Maintenance Checks and Services (PMCS) have been properly conducted.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. LO 11-5840-354-10, Lubrication Order for Radar Set AN/TPQ-36
- 2. TM 11-5820-890-10-1, SINCGARS Operator's Manual
- 3. TM 11-5840-354-10, Operator's Manual for Radar Set, AN/TPQ-36
- 4. TM 11-5840-354-20-1, Organizational Maintenance Manual for Radar Set AN/TPQ-36

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- 5. TM 11-5985-357-13, Ant Group OE-254/GRC
- 6. TM 2320-10/6A, Truck Utility 1-1/4 Ton 4X4
- 7. TM 5-6115-585-12, Operation and Organizational Maintenance for Generator Set, Diesel Engine Driven, Tactical

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System

DUTY AREA 29 - TARGET PROCESSING

TASK: 0848.29.01 (CORE PLUS) SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS

CONDITION(S): Given a target processing section in support of battlefield operations, a radar platoon/detachment complete with personnel and equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure all radar acquired hostile weapon locations received in the Target Processing Center (TPC) are properly recorded on a radar target card.
- 2. Ensure all radar acquired hostile weapon locations are verified on the target production map and routed through the following personnel:
 - a. Plotter.
 - b. Recorder.
 - c. S-2/Counterbattery Officer.
 - d. S-3.
- 3. Ensure all crater analysis and flash rays are properly processed.
 - a. Ensure all rays are properly recorded on the target production map.
 - b. Ensure all targets developed from rays are properly recorded on a crater analysis/flash ray target card.
 - c. Ensure all targets developed from rays are properly recorded in the artillery counterfire information journal.
- 4. Ensure all target indicators are evaluated using defined target selection standards.
- 5. Supervise the use and maintenance of the following forms, files, and journals:
 - a. Radar target card.
 - b. Radar target journal.
 - c. Artillery counterfire information journal.
 - d. Crater analysis/flash ray target card.
 - e. Target journal.
 - f. Radar fire mission data record.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: SSgt

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REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
-

TASK: 0848.29.02 (CORE PLUS) SUPERVISE MAINTENANCE OF THE TARGET PRODUCTION MAP

CONDITION(S): Given a target processing section in support of battlefield operations, radar platoon/detachment complete with personnel and equipment, and the references.

STANDARD(S): Per the references, ensuring currency of all overlays.

PERFORMANCE STEPS:

- 1. Ensure the counterfire reference grid overlay maintained on the target production map is updated, as required.
- 2. Ensure all crater analysis and flash rays are plotted on the ray overlay using a standard color code to reflect the caliber of the reported weapon system.
- 3. Ensure the target and target indicator overlay is properly maintained using the standard target symbol and color coded by accuracy of the reporting source.
- 4. Ensure the coordination and control features overlay is current, accurate, and reflects the following features:
 - a. Fire Support Coordination Measures (FSCMs).
 - b. Radar position and sectors of search.
 - c. Friendly units, boundaries, and zones of control.
 - d. Forward Edge of the Battle Area/Forward Line Of Troops (FEBA/FLOT).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. MCWP 3-16.1, Marine Artillery Support
- 3. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
-

TASK: 0848.29.03 (CORE PLUS) SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS

CONDITION(S): Given a target processing section complete with personnel and equipment in support of battlefield operations, a scheme of maneuver, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Establish and execute a cueing schedule for supporting radars using the survivability matrix.

- 2. Establish control of radio nets assigned to the Counterbattery Radar (CBR) platoon.
- 3. Assign and coordinate friendly fire missions, as required.
- 4. Direct and monitor voice/digital communications traffic to include the following:
 - a. Movement orders.
 - b. Operational reports.
 - c. Displacement reports.
 - d. New search data.
 - e. New zone data.
 - f. Cuing matrix.
 - g. Jam strobe reports.
 - h. Meteorological (MET) messages.
- 5. Coordinate and/or provide logistical support for all personnel and equipment organic to the Target Processing Section (TPS).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. TM 11-5840-354-10, Operator’s Manual for Radar Set, AN/TPQ-36

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
-

DUTY AREA 30 - METEOROLOGICAL

TASK: 0848.30.01 (CORE) SUPERVISE ACQUIRING AND RECORDING GROUND METEOROLOGICAL (MET) DATA

CONDITION(S): Given a psychrometer or psychron, FM 6-15, barometer (ML-102 or ML-333), DA Form 4524, pencil, anemometer ML-433/PM, DA Form 4469 (Wind Computation), scratch paper, adequate personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the determination and recording of the following:
 - a. Relative humidity.
 - b. Surface pressure.
 - c. Surface wind speed and direction.
 - d. Surface temperature.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. RN AM**AD-A, Surface Equipment (Barometer, Psychrometer, and Anemometer)

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- 3. TM 11-2421, Barometers ML-331/TM, ML-332/TM, ML-333/TM, and Mercurial Barometers ML-330/FM and ML-330A/FM
- 4. TM 11-427, Barometers ML-102-B, ML-102-D, ML-102-E, ML-102-F, ML-102-G, and ML-316/TM

TASK: 0848.30.02 (CORE) SUPERVISE SET UP AND OPERATION OF THE ML-474/GM MMS THEODOLITES

CONDITION(S): Given a tripod, ML-474/GM or MMS theodolite, two BA-30 batteries, declination for the area, inflated pilot balloon of the appropriate color for sky conditions, a stopwatch, DA Form 4469 (Wind Computation), adequate personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the set up, leveling, and orientation of the Meteorological (MET) theodolites.
- 2. Supervise the determination of critical angles with the Meteorological (MET) theodolites.
- 3. Supervise the determination, announcement, and recording of elevation and azimuth angles while tracking a balloon.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. RN AM33AE, Theodolite ML-474/GM
- 3. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
- 4. TM 11-6675-200-10, Operator's Manual: Theodolite ML-46C through ML-47R, ML-247, and ML-0247A, and Double Center Theodolite ML-474/Gm and ML-474A/GM

ADMINISTRATIVE INSTRUCTIONS: This standard will incorporate all Meteorological (MET) theodolites currently in use as well as new versions to be fielded. The reference material will provide adequate support for any new equipment.

TASK: 0848.30.03 (CORE) SUPERVISE THE ENCODING AND RECORDING OF METEOROLOGICAL MESSAGES

CONDITION(S): Given the surface pressure, location, octant, and height of the Meteorological (MET) station, DA Form 3677 (Computer MET Message), a completed wind computation form, DA Form 5033-R (Limited Surface Observation), anemometer ML-433/PM, psychrometer ML-224 or psychron, barometer, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the correct recording of a Computer Meteorological (MET) Message.
- 2. Verify the validity of a Fallout Meteorological (MET) Message.
- 3. Verify the encoding/decoding of a Target Acquisition Message.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. FM 6-16-2, Tables for Artillery Met, Visual Ballistic Type 3 , Computer Met Message and Limited Surface Observation
- 2. FMH #1, Federal Meteorological Handbook, Surface Observations

- 3. FMH #4, Federal Meteorology Handbook, Radiosonde Code
- 4. FMH #6, Federal Meteorology Handbook, Upper Wind Codes
- 5. MCWP 3-16.5, Field Artillery Meteorology

TASK: 0848.30.04 (CORE) SUPERVISE MAINTENANCE OF METEOROLOGICAL EQUIPMENT

CONDITION(S): Given an ML-474/GM or MMS theodolite, section cleaning equipment, Equipment Repair Order (ERO) - NAVMC Form 10245, TM 11-6675-200-10, organizational tools, test equipment, spare parts, paint, paint brush, Preventive Maintenance Record (PMR) (4700) - NAVMC Form 10561, DA Pam 310-4, DA Form 2404, a Meteorological Measuring Set (MMS) with operator level faults and operator replacement parts, and the references.

STANDARD(S): Per the references, ensuring all appropriate maintenance is conducted.

PERFORMANCE STEPS:

- 1. Supervise the performance of operator’s maintenance on Meteorological (MET) Theodolites.
- 2. Supervise the performance of operator’s Preventive Maintenance Checks and Services (PMCS) on the Meteorological Measuring Set (MMS).
- 3. Supervise the performance of operator’s troubleshooting procedures on the Meteorological Measuring Set (MMS) for detected faults.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCO P4790.2, MIMMS Field Procedures
- 2. MCWP 3-16.5, Field Artillery Meteorology
- 3. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
- 4. TM 11-6675-200-10, Operator’s Manual: Theodolite ML-46C through ML-47R, ML-247, and ML-0247A, and Double Center Theodolite ML-474/Gm and ML-474A/GM
- 5. TM 4700-15/1, Equipment Record Procedures

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0414, Ground Maintenance Management Procedures for Supervisors
- 3. 0416, The Marine Corps Publications and Directives System

TASK: 0848.30.05 (CORE) IDENTIFY SIGNIFICANT WEATHER CHANGES

CONDITION(S): Given a change of weather during the sounding schedule, a stopwatch, an inflated balloon, equipment, adequate personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Identify the passage of warm and cold fronts.
- 2. Identify the cloud types and verify their heights.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. FMH #1, Federal Meteorological Handbook, Surface Observations

2. MCWP 3-16.5, Field Artillery Meteorology
 3. TM 11-6660-222-12, Meteorological Psychrometers
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TASK: 0848.30.06 (CORE) SUPERVISE THE LOADING, MOVEMENT, EMPLACEMENT, AND DESTRUCTION OF A METEOROLOGICAL SECTION

CONDITION(S): Given a complete Meteorological (MET) section, a map, grid coordinates and altitude to the next position, the requirement to move, a coordinate scale, a simulated/actual emergency wherein the position is about to be over run, the order to destroy equipment, adequate personnel, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Prepare a loading plan for a Meteorological (MET) section.
2. Direct the movement, emplacement, and operation of a Meteorological (MET) section.
3. Plan the destruction of the Meteorological (MET) section's equipment and material to prevent enemy use.
4. Supervise the destruction of Meteorological (MET) equipment (Simulated for training purposes).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation
2. MCWP 3-16.5, Field Artillery Meteorology
3. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
4. TM 750-244-2, Procedures for Destruction of Electronic Materiel to Prevent Enemy Use (Electronics Command)

DISTANCE LEARNING PRODUCT(S):

1. 045, The Logistics/Embarkation Specialist
2. 047, Introduction to Amphibious Embarkation

ADMINISTRATIVE INSTRUCTIONS: For training purposes, destruction of the Meteorological section must only be simulated.

TASK: 0848.30.07 (CORE) SUPERVISE THE EMPLACEMENT OF THE METEOROLOGICAL MEASURING SET (MMS) AND ASSOCIATED EQUIPMENT

CONDITION(S): Given a Meteorological Measuring Set (MMS) shelter, a generator with trailer and power cables, identified Radio Direction Finder (RDF) site, one orientation point, sledge hammer, a remote antenna site, theodolite emplacement site, adequate personnel, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Direct and supervise the emplacement of the Meteorological Measuring Set (MMS) shelter.
2. Direct and supervise the emplacement and alignment of the Radio Direction Finder (RDF) antenna.
3. Supervise emplacement of the remote Navigational Aid (NAVAID) antenna assembly.

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- 4. Supervise the emplacement of the Meteorological (MET) theodolite.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

ADMINISTRATIVE INSTRUCTIONS: Supervision includes tactical emplacement ensuring best possible coverage for supported units and site selection for best use of equipment.

TASK: 0848.30.08 (CORE) SUPERVISE THE POWER UP/DOWN OF THE METEOROLOGICAL MEASURING SET (MMS)

CONDITION(S): Given the outside air temperature, a job aid, a complete Meteorological Measuring Set (MMS) system in a field location, adequate personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Ensure the correct environment is established in the Meteorological Measuring Set (MMS).
- 2. Supervise the establishment of system power within the Meteorological Measuring Set (MMS) shelter using both AC and DC power.
- 3. Supervise the performance of power interrupt emergency shut down procedures on the Meteorological Measuring Set (MMS).
- 4. Supervise the performance of temporary shut down procedures on the Meteorological Measuring Set (MMS).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0848.30.09 (CORE) SUPERVISE THE PERFORMANCE OF SYSTEM GENERATION (SYSGEN)

CONDITION(S): Given an operational Meteorological Measuring Set (MMS), a packet of printing paper, all initialization data, adequate personnel, and references.

STANDARD(S): Per the references, ensuring accurate input of system generation data into the MARWIN processor.

PERFORMANCE STEPS:

- 1. Supervise the preparation of the printer for mission.
- 2. Verify the correct entry of SYSGEN data into the MARWIN processor.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. MCWP 3-16.5, Field Artillery Meteorology
- 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.

TASK: 0848.30.10 (CORE) SUPERVISE THE SELECTION OF AN OPERATING MODE AND VERIFICATION OF SYSTEM SYNCHRONIZATION

CONDITION(S): Given an operational Meteorological Measuring Set (MMS), preflight procedures in progress, adequate personnel, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise the establishment of the LORAN tracking mode and LORAN synchronization.
2. Supervise the establishment of the Global Positioning System (GPS) tracking mode and GPS synchronization.
3. Supervise the establishment of the Radio Direction Finder (RDF) tracking mode.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
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TASK: 0848.30.11 (CORE) SUPERVISE THE PERFORMANCE OF RADIOSONDE COEFFICIENT ENTRY AND GROUND CHECK

CONDITION(S): Given an operational Meteorological Measuring Set (MMS), radiosonde coefficient tape, a selection of factory packed radiosondes, a list of assigned frequencies, an inspected radiosonde with an activated battery, adequate personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the correct entry of radiosonde coefficient data into the MARWIN processor.
2. Supervise the unpacking and inspection of the Meteorological Measuring Set (MMS) radiosonde.
3. Ensure the proper setting of the radiosonde frequency.
4. Supervise the performance of a ground check.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
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TASK: 0848.30.12 (CORE) SUPERVISE THE PREPARATION OF RADIOSONDE FOR LAUNCH AND INPUT OF SURFACE OBSERVATION DATA

CONDITION(S): Given an inflated balloon, a radiosonde, parachute, twine, an operational Meteorological Measuring Set (MMS), an oriented Radio Direction Finder (RDF), an identified flight release point, orientation data, required surface observation data, adequate personnel, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Ensure the correct preparation of the Meteorological Measuring Set (MMS) radiosonde and balloon train.
2. Verify the correct entry of orientation data into the MARWIN processor.
3. Verify the correct entry of surface observation data into the MARWIN processor.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
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TASK: 0848.30.13 (CORE) SUPERVISE THE ESTABLISHMENT OF COMMUNICATIONS

CONDITION(S): Given a Meteorological Measuring Set (MMS) with all shelter units turned on, all necessary subscriber information, adequate personnel, and the references.

STANDARD(S): Per the references, ensuring establishment of both voice and digital communications.

PERFORMANCE STEPS:

1. Direct and supervise the establishment of voice communications.
2. Direct and supervise the establishment of digital communications.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
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TASK: 0848.30.14 (CORE) SUPERVISE METEOROLOGICAL MEASURING SET (MMS) FLIGHT OPERATIONS

CONDITION(S): Given an operational Meteorological Measuring Set (MMS) with a flight in progress, emplaced Radio Direction Finder (RDF), a radiosonde and balloon train, inflated pilot balloon, PIBAL flight parameters, raw flight data, adequate personnel, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise the monitoring of an Meteorological Measuring Set (MMS) Navigational Aid (NAVAID) flight.
2. Supervise the monitoring of a Meteorological Measuring Set (MMS) Radio Direction Finder (RDF) flight.
3. Supervise tracking of a pilot balloon with a Meteorological (MET) theodolite.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. MCWP 3-16.5, Field Artillery Meteorology
 2. TM 10103A-13/6, Operators Manual, Meteorological Measuring Set AN/TMQ-41 and Radiosonde Set ML-662,663,664,665,666/TMQ-4A.
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TASK: 0848.30.15 (CORE) PLAN AND IMPLEMENT A METEOROLOGICAL (MET) SECTION'S FLIGHT SCHEDULE

CONDITION(S): Given a Naval Observatory Sunrise/Sunset chart for the section's location and time zone, specific mission requirements, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine night, transition, and afternoon hours.
2. Plan the section's flight schedule.
3. Consider frontal passages to plan and prepare for flight schedule additions.
4. Select operating mode (LORAN, GPS, RDF).
5. Implement the section's flight schedule.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. Sunrise/Sunset Chart, Nautical Almanac Office, US Naval Observatory
2. MCWP 3-16.5, Field Artillery Meteorology

TASK: 0848.30.16 (CORE) PLAN AND MANAGE THE MET SECTION'S EXPENDABLE INVENTORY

CONDITION(S): Given an operational Meteorological Measuring Set (MMS), an SL-3, an inventory control sheet, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise the inventory of a Meteorological (MET) section's SL-3 requirements.
2. Determine the required amount of expendable for a four week operation.
3. Manage the expendables by supervising the reorder/resupply of the expendables.
4. Ensure the proper storage of all dated expendables.
5. Supervise the proper storage of helium cylinders.
6. Supervise the proper storage of calcium hydride charges.

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. MCO P4790.2, MIMMS Field Procedures
2. MCWP 3-16.5, Field Artillery Meteorology
3. SL-3, EMT SUPPORT KIT(MET), EMT Support Kit (MET)
4. SL-3-08972A, Meteorological Station, AN/TMQ-4A

ADMINISTRATIVE INSTRUCTIONS: Safety instructions:

a. When storing hydrogen or calcium hydride charges, display conspicuous warning signs:

DANGER HYDROGEN
NO SMOKING WITHIN 15 METERS
DANGER CALCIUM HYDRIDE STORAGE
IN CASE OF FIRE DO NOT USE WATER

- b. Calcium hydride must be stored in an area protected from water.
- c. When storing bottled helium gas, ensure the bottles remain upright with the protective cap in place.

DUTY AREA 31 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) INITIALIZATION

TASK: 0848.31.01 (CORE) VERIFY INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) SETUP CONFIGURATION

CONDITION(S): Given two Initial Fire Support Automated Systems (IFSAS), radios (SINCGARS), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify all peripheral equipment is present.
- 2. Verify all cables are properly connected for Single Terminal Command Post (SCTP) configuration.
- 3. Verify the proper power up procedures are performed.
- 4. Verify the proper power down procedures are performed.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0848.31.02 (CORE) VERIFY INITIALIZATION DATA WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), radios (SINCGARS), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the correct computer input of a time hack, received by voice.
- 2. Verify the appropriate Artillery Target Intelligence Mode of operation is entered into the computer.
- 3. Verify the input of an assigned target block into the computer.
- 4. Verify the correct assignment of peripheral devices.
- 5. Verify the input of the Map Modification message.
- 6. Direct the entry of the Map center.
- 7. Verify the restoration of a previously recorded Salvage Point Recording (SPR).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids

2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0848.31.03 (CORE) VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES IN THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given two Initial Fire Support Automated Systems (IFSAS), radios (SINGARS), Task Organization subscriber table, and the references.

STANDARD(S): Per the references, ensuring accuracy.

PERFORMANCE STEPS:

1. Ensure all digital net parameters are entered correctly in the NET SETTING file.
2. Verify all required subscriber data is entered in the SUBSCRIBER file.
3. Verify all required messages are made legal in the LEGAL MESSAGE file.
4. Verify modifications to the Priority Classification Logging and Display file are entered.
5. Verify the establishment of Digital Message Device (DMD) relay setup.
6. Verify the establishment of computer as a distant station in a RELAY scheme.
7. Ensure the correct transmission of the AUTO resync message when maintaining digital synchronization within the Battlefield Communication Terminal/Lightweight Computer Unit (BCT/LCU).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
2. MCFSS Version 9.57 SOP
3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

DUTY AREA 32 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL DATABASE
CONSTRUCTION

TASK: 0848.32.01 (CORE) VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), radios (SINGARS), and the references.

STANDARD(S): Per the references, ensuring accuracy.

PERFORMANCE STEPS:

1. Determine grid coordinate points from a 1:50,000 scale map to be entered as the following types of Battlefield Geometry:
 - a. No Fire Areas (NFA)
 - b. Free Fire Area (FFA)
 - c. Airspace Coordination Area (ACA)
 - d. Coordinated Fire Line (CFL)
 - e. SFZ
 - f. Forward Line Of Troops (FLOT)

- 2. Verify the naming and entry of all types of Battlefield Geometry into the computer.
- 3. Verify the input and search of the Survey Control Point (SCP) file.
- 4. Determine location, left and right limits, and minimum and maximum range for a Support Search message.
- 5. Determine grid coordinate points to be entered as Radar Call For Fire zones, Critical Friendly Fire zones, Artillery Target Intelligence zones, and Censor zones.
- 6. Direct the automatic search and retrieval of SUPPORT data that might be present in another computer by the use of the Support Command XMIT TO ME function.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
 - 2. MCFSS Version 9.57 SOP
 - 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
-

TASK: 0848.32.02 (CORE) VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), a Single Terminal Command Post (STCP), radios (SINCGARS), and the references.

STANDARD(S): Per the references, ensuring currency.

PERFORMANCE STEPS:

- 1. Verify all fields entered in the AFU;UPDATE message.
- 2. Verify all fields entered in the Battalion Ammunition Update message.
- 3. Direct the input of data into the Controlled Supply Rate (CSR) message (AFU;CSR).
- 4. Direct the input of data into the Ammunition Level message (AFU;AMOL).
- 5. Verify the validity and direct the transfer of Registration data message (AFU;REG).
- 6. Verify the accuracy of data entered in the Mission Fired Report message (AFU;MFR).
- 7. Direct the automatic search and retrieval of all fire unit ALL data that might be present in another computer by the use of the Ammunition Fire Unit Command XMIT TO ME function.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
 - 2. MCFSS Version 9.57 SOP
 - 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0848.32.03 (CORE) VERIFY THE INPUT OF METEOROLOGICAL (MET) DATA IN THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

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CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), a Single Terminal Command Post (STCP), radios (SINCGARS), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify a Compute Meteorological (MET) message that is digitally received.
2. Verify a Target Acquisition Meteorological (MET) message.
3. Verify a Fallout Meteorological (MET) message.
4. Verify a Forecast Meteorological (MET) message.
5. Using the MET Command XMIT TO ME function, direct the automatic search and retrieval of a Computer Meteorological (MET) message that might be present in another computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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DUTY AREA 33 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL FIRE CONTROL

TASK: 0848.33.01 (CORE) VERIFY THE INPUT OF COMMANDER'S CRITERIA INFORMATION IN THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), appropriate operations order Tab, and the references.

STANDARD(S): Per the references, ensuring the accuracy of the Commander's Modification File information.

PERFORMANCE STEPS:

1. Verify the input of data into the Fire Mission Modification File (MF;MOD).
2. Direct the ordering of fire units into the Fire Unit Selection File (FM;FUSEL).
3. Direct the entry of Maximum Volley into the Fire Unit Selection File (FM;FUSEL).
4. Direct the exclusion of a particular fire unit, fuze, and/or shell from being considered by the use of the Fire Unit Exclusion File (FM;XCLUDE).
5. Verify the input and modification of commander's Attack Guidance (AG) into the Fire Mission Attack File (FM;ATTACK).
6. Direct the input of a Battalion Fire Direction Center (FDC) into the Center file (FM;CENTER), to include its subordinate fire units.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0848.33.02 (CORE) SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), Observer Digital Terminal (ODT), Battery Computer System (BCS), Fire Support Coordination Center (FSCC) Initial Fire Support Automated System (IFSAS), radios (SINGARS), appropriate operation’s order Tab, and the references.

STANDARD(S): Per the references, ensuring compliance with the three modes of fire mission approval.

PERFORMANCE STEPS:

1. Supervise the processing of an adjust fire mission in the Fire Support Coordination Center (FSCC) approval mode.
2. Supervise the processing of an adjust fire mission in the CENTRALIZE mode.
3. Supervise the processing of an adjust fire mission in the AUTONOMOUS mode.
4. Direct the Battlefield Communication Terminal (BCT) operator to Mass the Battalion fire units.
5. Direct the Battlefield Communication Terminal (BCT) operator to MASS ALL Centers entered in the Regiment Center file.
6. Using the Fire Mission Command XMIT TO ME function, direct the automatic search and retrieval of all observer location data that might be present in another computer.
7. Direct the recall of an active mission by the use of the Fire Mission command file.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0848.33.03 (CORE) SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), Observer Digital Terminal (ODT), Battery Computer System (BCS), Battalion Fire Support Coordination Center (FSCC) Initial Fire Support Automated System (IFSAS), radios (SINGARS), appropriate operations order Tab, and the references.

STANDARD(S): Per the references, ensuring compliance with the three modes of fire mission approval.

PERFORMANCE STEPS:

1. Supervise the processing of the following special missions in the Fire Support Coordination Center (FSCC) approval mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.

- g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.
2. Supervise the processing of the following special missions in the CENTRALIZED mode:
- a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.
3. Supervise the processing of the following special missions in the AUTONOMOUS mode:
- a. Fire Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the Fire Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

DUTY AREA 34 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) ARTILLERY TARGET INTELLIGENCE

TASK: 0848.34.01 (CORE) SUPERVISE THE INPUT AND RETRIEVAL OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), a Single Terminal Command Post (STCP), radios (SINCGARS), appropriate operation's order Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the input of the following Artillery Target Intelligence (ATI) reports:
 - a. Coordinate Report (ATI;CDR).

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- b. Shell Report (ATI;SHR).
- c. Azimuth Report (ATI;AZR).
- d. Surveillance Report (ATI;SVL).
- e. Combat Target Intelligence (ATI;CBTI).

- 2. Using the ATI Search message, direct the retrieval of targets from target file that may meet more than one search criteria.
- 3. Direct the automatic search and retrieval of targets that meet one or more search criteria from an ATI MODE 3 computer by the use of the ATI;QUERRY XMIT TO ME message function.
- 4. Direct the posting of a Standing Request for Information to an Artillery Target Intelligence (ATI) MODE 3 computer, for incoming targets that meet one or more criteria.
- 5. Direct the inclusion of targets from target file that meet a specific search criteria into a Fire Plan List by the use of the ATI Prepare Fire Plan message (ATI;PREFP).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0848.34.02 (CORE) VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), a Single Terminal Command Post (STCP), radios (SINCGARS), appropriate operation's order Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the input of the following Artillery Target Intelligence (ATI) Modification file messages:
 - a. ATI;SVMOD.
 - b. ATI;FMMOD.
 - c. ATI;TBMOD.
 - d. ATI;DPMOD.
 - e. ATI;STAT.
- 2. Verify the input of data into the following Artillery Target Intelligence (ATI) Command Target reports:
 - a. ATI;TRY.
 - b. ATI;COMB.
 - c. ATI;SPLIT.
- 3. Using ATI USER COMMAND message, direct printing of ATI MODE 3 target file.
- 4. Direct the printing of all Standing Requests for Information posted in the ATI MODE 3 computer by the use of the ATI USER COMMAND messages.

5. Using the ATI;CRIT message, direct the transmission of specific target criteria parameters to another ATI MODE 3 computer.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

DUTY AREA 35 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) NONNUCLEAR FIRE PLANNING

TASK: 0848.35.01 (CORE) DIRECT THE COMPUTATION OF A NONNUCLEAR FIRE PLAN WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), a Single Terminal Command Post (STCP), radios (SINCGARS), appropriate operation's order Tab, and the references.

STANDARD(S): Per the references and within 20 minutes.

PERFORMANCE STEPS:

- 1. Verify the building of a Fire Plan MOD file by the use of the NNFP;COMD message.
- 2. Verify the building of a Fire Plan Tactical Database by the use of the Support and AFU Build message.
- 3. Verify the input of targets into the Fire Plan Preliminary Target List (NNFP;FPLST).
- 4. Using the NNFP;INSTR message, verify the instruction and movement of targets from the FPLST to the Fire Plan Target List.
- 5. Using the NNFP;RESFU message, direct a particular unit to be reserved from firing for a period of the schedule.
- 6. Direct the computation of the Fire Plan by the use of the NNFP;COMFP message.
- 7. Using the NNFP;EXECFP, direct the execution of a Fire Plan once H-Hour is established.
- 8. Using the NNFP;EXEFCP, direct the generation of Fire Commands for review.
- 9. Direct the transmission of the following Fire Plan target files:
 - a. NNFP;FPLST
 - b. NNFP;FPTGT
 - c. NNFP;TISF
 - d. NNFP;PC

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0848.35.02 (CORE) DIRECT THE COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

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CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), radios (SINGARS), appropriate operations order Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the building of a Fire Plan MOD file by the use of the NNFP;COMD message.
2. Verify the building of a Fire Plan Tactical Database by the use of the Support and AFU Build message.
3. Verify the input of Family of Scatterable Mines (FASCAM) targets into the Fire Plan.
4. Using the NNFP;FASCAM message, direct the computation of the FASCAM Fire Plan.
5. Verify possible Fire Plan Exceptions.
6. Direct the transmission of the Fire Commands to the firing unit.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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DUTY AREA 36 - MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) TECHNIQUES AND OPERATIONS

TASK: 0848.36.01 (CORE PLUS) DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE USE OF THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given two Dual Terminal Command Post (DTCP) Initial Fire Support Automated Systems (IFSAS), radios (SINGARS), appropriate operation's order Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify all required equipment is available for JUMP operations.
2. Direct the establishment of voice and digital communication with all required subscribers.
3. Assume control of the MAIN, as required and directed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0848.36.02 (CORE) SUPERVISE A CHANGE IN FIELD ARTILLERY MISSION (GS/GSR/R) TO A DIRECT SUPPORT (DS) MISSION WITH THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), radios (SINGARS), Task Organization subscriber table, appropriate operations order Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the entry of all required subscriber data.
2. Direct the modification of all required computer files in order to support operations.
3. Direct the establishment of voice and digital communications.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0848.36.03 (CORE) COORDINATE THE MANAGEMENT OF AN INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) EQUIPPED FIRE DIRECTION CENTER (FDC)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Initial Fire Support Automated System (IFSAS), radios (SINGARS), appropriate operation's order Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Direct the preparation of the following file orders:
 - a. COMM
 - b. SUPPORT
 - c. AFU
 - d. FM
 - e. ATI
 - f. FIRE PLAN
2. Direct the time cycle for the update of all files, based on the tactical situation.
3. Direct the management of Salvage Point Recordings (SPR).

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

1. BCT Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0848.36.04 (CORE) PREPARE UNIT MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) SUSTAINMENT TRAINING PLAN

CONDITION(S): Given a unit annual training plan and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Maintain an adequate Marine Corps Fire Support System (MCFSS) classroom at the unit level.

2. Schedule individual training for the following Marine Corps Fire Support System (MCFSS) equipment operators:
- a. Battery Computer System (BCS)
 - b. Battlefield Communication Terminal/Lightweight Computer Unit (BCT/LCU)
 - c. Q-46
 - d. Target Processing Center (TPC) (MODE 3)
 - e. Digital Communications Terminal (DCT)
 - f. Meteorological Data System (MDS)

INITIAL TRAINING SETTING: FLC Sustainment: 3 Req By: SSgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

DUTY AREA 37 - 81 MM MORTAR PLATOON OPERATIONS

TASK: 0848.37.01 (CORE) SET UP THE M16 PLOTTING BOARD FOR WEAPONS EQUIPPED WITH THE M64-SERIES SIGHT

CONDITION(S): Given an M16 plotting board, lay information, the azimuth of lay, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Plot the aiming circle.
- 2. Plot the remaining pieces.
- 3. Establish an azimuth index.
- 4. Determine piece displacement.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. Battle Drill Guide (BDG) System Book Five A
- 2. FM 23-91, Mortar Gunnery

DISTANCE LEARNING PRODUCT(S):

- 1. 0331, 81mm Mortar NCO

ADMINISTRATIVE INSTRUCTIONS: Although infrequently used, this technique may be employed in some unique circumstances. Therefore, although Enclosure (3) indicates this task should be trained to standard MOJT in the FMF, training for this task is the commander's call. The MCI Battle Drill Guide Book 5A on Manual Gunnery Procedures has detailed steps on completing this task.

TASK: 0848.37.02 (CORE PLUS) DETERMINE TERRAIN GUN POSITION CORRECTIONS

CONDITION(S): Given an M16 plotting board with pieces plotted, instructions from the Platoon Commander (PLT CMDR) with regard to range and charge, and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Plot the aimpoints.
2. Determine each mortar deflection correction.
3. Determine each mortar muzzle velocity range correction.
4. Determine each mortar range correction.
5. Determine each mortar Quadrant Elevation (QE) correction.
6. Determine each mortar time correction.
7. Determine each mortar limits and plot the limits on the firing chart.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. Battle Drill Guide (BDG) System Book Five A
2. FM 23-91, Mortar Gunnery

DISTANCE LEARNING PRODUCT(S):

1. 0331, 81mm Mortar NCO

ADMINISTRATIVE INSTRUCTIONS: Although infrequently used, this technique may be employed in some unique circumstances. Therefore, although Enclosure (3) indicates this task should be trained to standard MOJT in the FMF, training for this task is the commander's call. The MCI Battle Drill Guide Book 5A on Manual Gunnery Procedures has detailed steps on completing this task.

TASK: 0848.37.03 (CORE PLUS) DETERMINE SPECIAL CORRECTIONS

CONDITION(S): Given an M16 plotting board with pieces plotted, a fire order, instructions from the Platoon Commander (PLT CMDR) with regard to range, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine special corrections for a converged sheaf.
2. Determine special corrections for a target described by a grid, length, and an attitude.
3. Determine special corrections for a target described by two grids.
4. Determine special corrections for a target described by the three or more grids.
5. Determine special corrections for a circular target.
6. Determine corrections for a laser adjust fire mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. Battle Drill Guide (BDG) System Book Five A
2. FM 23-91, Mortar Gunnery

DISTANCE LEARNING PRODUCT(S):

1. 0331, 81mm Mortar NCO

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ADMINISTRATIVE INSTRUCTIONS: Although infrequently used, this technique may be employed in some unique circumstances. Therefore, although Enclosure (3) indicates this task should be trained to standard MOJT in the FMF, training for this task is the commander's call. The MCI Battle Drill Guide Book 5A on Manual Gunnery Procedures has detailed steps on completing this task.

TASK: 0848.37.04 (CORE PLUS) DETERMINE HASTY SPECIAL CORRECTIONS

CONDITION(S): Given an M16 plotting board with pieces plotted, a fire order, instructions from the Platoon Commander (PLT CMDR) with regard to range, the appropriate hasty correction table, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the hasty deflection correction.
2. Determine the hasty Quadrant Elevation (QE) correction.
3. Determine the hasty Muzzle Velocity (MV) correction.
4. Determine the hasty total Quadrant Elevation (QE) correction.
5. Determine the hasty fuze setting correction.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. Battle Drill Guide (BDG) System Book Five A
2. FM 23-91, Mortar Gunnery

DISTANCE LEARNING PRODUCT(S):

1. 0331, 81mm Mortar NCO

ADMINISTRATIVE INSTRUCTIONS: Although infrequently used, this technique may be employed in some unique circumstances. Therefore, although Enclosure (3) indicates this task should be trained to standard MOJT in the FMF, training for this task is the commander's call. The MCI Battle Drill Guide Book 5A on Manual Gunnery Procedures has detailed steps on completing this task.

TASK: 0848.37.05 (CORE PLUS) DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF OFFENSIVE OPERATIONS

CONDITION(S): When assigned as the mortar section leader/platoon commander, or rifle platoon commander/sergeant with a mortar squad or section attached; given a field environment scenario involving an offensive mission during daylight or darkness; a mortar squad or section as part of a platoon, company or larger attack; all related equipment and ammunition; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Receive a five paragraph order.
2. Plan mission assigned.
3. Issue an order to subordinates.
4. Select firing positions.
5. Identify and determine range to targets.
6. Establish communications, both internal and external.

7. Supervise lay of the guns or positioning of vehicles.
8. Determine safety limits.
9. Ensure the security of the crews is integrated with parent or adjacent units.
10. Issue fire commands.
11. Cease the engagement.
12. Direct the displacement of the squad or section.
13. Assist in the consolidation of objective by firing to protect against counterattack, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

1. FM 23-91, Mortar Gunnery
2. FM 7-90, Tactical Employment of Mortars
3. MCWP 3-11.1, Marine Rifle Company/Platoon (FMFM 6-4)

DISTANCE LEARNING PRODUCT(S):

1. 0322, The 81mm Mortar Crewman
2. 0331, 81mm Mortar NCO
3. 0338, The LAV Crewman
4. 0382, Infantry Squad Leader: Weapons and Fire Support
5. 7400, Warfighting Skills Distance Education Program

ADMINISTRATIVE INSTRUCTIONS:

1. This task will be trained on the Indoor Simulated Marksmanship Trainer (ISMT) before expending live rounds.
2. The offensive operation order, and subsequent frag orders must include: the method of employment, rates of fire, and signals to begin and cease fires on assigned targets. The Marine must ensure priority of targets and scheme of maneuver are clearly understood by the mortar crews and tactical mortar positions are prepared by the squad or section, as required. He must maintain communications with the squads or sections and higher. He must ensure mortar employment principles are used to neutralize, canalize, or destroy enemy personnel and armor threats.

TASK: 0848.37.06 (CORE PLUS) DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF DEFENSIVE OPERATIONS

CONDITION(S): When assigned as the mortar section leader/platoon commander, or rifle platoon commander/sergeant with a mortar squad or section attached; given a field environment scenario involving a defensive mission during daylight or darkness; a mortar squad or section as part of a platoon or company defense; all related equipment and ammunition; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Receive a five paragraph order.
2. Conduct a reconnaissance of the area.
3. Issue a defensive order to your attachments.
4. Direct method of employment assigned by unit commander.

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- 5. Assign sectors Final Protective Fires (FPFs) of the defense or attach squads to supported units.
- 6. Establish and maintain communications with each squad or section and the unit commander.
- 7. Supervise the improvement of positions.
- 8. Ensure the security of the crews is integrated with parent or adjacent units.
- 9. Direct the consolidation of the squad or section, as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 23-91, Mortar Gunnery
- 2. FM 7-90, Tactical Employment of Mortars
- 3. MCWP 3-11.1, Marine Rifle Company/Platoon (FMFM 6-4)

DISTANCE LEARNING PRODUCT(S):

- 1. 0322, The 81mm Mortar Crewman
- 2. 0331, 81mm Mortar NCO
- 3. 0338, The LAV Crewman
- 4. 0382, Infantry Squad Leader: Weapons and Fire Support
- 5. 7400, Warfighting Skills Distance Education Program

ADMINISTRATIVE INSTRUCTIONS: The Marine must prepare and issue a defensive operation order and subsequent frag orders to the attached mortar squad or section that includes: the method of employment, rates of fire, signals to begin and cease assigned Final Protective Fires (FPFs). He must ensure FPFs are clearly understood by the mortar crews and that tactical mortar positions are prepared by the squad or section. He must maintain communications with the squads or sections and higher. He must ensure mortar employment principles are used to neutralize, canalize, or destroy enemy personnel and armor threats.

TASK: 0848.37.07 (CORE PLUS) SELECT A MORTAR POSITION

CONDITION(S): When assigned as the mortar section leader/platoon commander, or rifle platoon commander/sergeant with a mortar squad or section attached; given a field environment scenario during daylight or darkness; a mortar unit; all related equipment and ammunition; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Conduct map, air, or ground reconnaissance.
- 2. Determine if position supports mission accomplishment.
- 3. Analyze both friendly and enemy tactical situation.
- 4. Establish range criteria.
- 5. Ensure maximum target area coverage.
- 6. Determine survivability.
- 7. Analyze overhead and mask clearance.
- 8. Inspect ground surface conditions.

- 9. Assess communications ability.
- 10. Assess routes.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 23-90, Mortars
- 2. FM 7-90, Tactical Employment of Mortars

DISTANCE LEARNING PRODUCT(S):

- 1. 0331, 81mm Mortar NCO

TASK: 0848.37.08 (CORE PLUS) LAY MORTAR SECTION/PLATOON PARALLEL

CONDITION(S): When assigned as an 81mm mortar section leader, given an 81mm mortar section/platoon, an M2 compass, an aiming circle, and the references.

STANDARD(S): Per the references, within 7 minutes and ensuring 30-35 meters between guns.

PERFORMANCE STEPS:

- 1. Orient the circle using grid direction.
- 2. Direct the lay of each mortar on direction posts with a deflection of 2800 set on the sight (M64).
- 3. Align the base gun on the desired azimuth.
- 4. Refer remaining guns to the lens of the base mortar.
- 5. Refer the base mortar to the lens of the remaining guns.
- 6. Repeat this process until mortars are laid to within one mil.
- 7. Direct aiming posts to be placed out.
- 8. Confirm each mortar's lay.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 23-91, Mortar Gunnery
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

PERFORMANCE SUPPORT TOOL(S):

- 1. Laying Methods & Hasty Survey Methods

TASK: 0848.37.09 (CORE PLUS) DIRECT FIRE DIRECTION CENTER (FDC) OPERATIONS

CONDITION(S): Given an 81mm mortar platoon/section, Fire Direction Center (FDC), Call For Fire (CFF), an operations order, a tactical situation, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Evaluate the incoming Call For Fire (CFF).
- 2. Prepare fire command.
- 3. Prepare the Fire Direction Center (FDC) order.

- 4. Verify corrections and commands.
- 5. Maintain records of all fire missions and all applied corrections, including round count.
- 6. Evaluate and relay target surveillance data and intelligence reports from Forward Observer (FO).
- 7. Inform Fire Support Coordinator (FSC) of any Calls For Fire (CFFs) that cannot be engaged.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 23-91, Mortar Gunnery
- 2. MCWP 3-16.3, Field Artillery Cannon Battery

DISTANCE LEARNING PRODUCT(S):

- 1. 0331, 81mm Mortar NCO

TASK: 0848.37.10 (CORE PLUS) DIRECT A MORTAR SECTION/PLATOON DISPLACEMENT

CONDITION(S): When assigned as a mortar section leader/platoon commander, given a Fire Direction Center (FDC), ammunition, all necessary equipment, an order to displace, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Select next position.
- 2. Issue order to displace.
- 3. Supervise displacement.
- 4. Monitor incoming calls.
- 5. Conduct "hip shoot", as required.
- 6. Direct establishment of new position within range of the maneuvering units.
- 7. (For 81s) Ensure capacity to provide continuous fire support by maintaining communication with the Fire Direction Center (FDC) and the other section.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: SSgt

REFERENCE(S):

- 1. FM 23-90, Mortars
- 2. FM 7-90, Tactical Employment of Mortars

DISTANCE LEARNING PRODUCT(S):

- 1. 0331, 81mm Mortar NCO

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MOS 0861, FIRE SUPPORT MAN

DUTY AREA 01 - MAP READING AND M2 COMPASS

TASK: 0861.01.01 (CORE) DECLINATE AN M2 COMPASS USING THE FIELD EXPEDIENT METHOD

CONDITION(S): Given an M2 compass, a map with declination constant, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Determine the Grid-Magnetic (G-M) angle from the declination diagram on the map.
2. Using the azimuth adjusting scale, set off the Grid-Magnetic (G-M) angle by rotating the adjusting screw.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
 2. 0385, Land Navigation (Web)
-

TASK: 0861.01.02 (CORE) ORIENT A MAP USING A DECLINATED M2 COMPASS

CONDITION(S): Given a declinated M2 compass, a map, and the reference.

STANDARD(S): Per the reference and to within 10 mils.

PERFORMANCE STEPS:

1. Place the M2 compass along one of the north-south grid lines with the compass cover toward top of the map.
2. Rotate the map until the black end of the needle aligns with zero.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
 2. 0385, Land Navigation (Web)
-

TASK: 0861.01.03 (CORE) LOCATE YOUR POSITION DURING A TERRAIN WALK

CONDITION(S): Given a map, a compass, a coordinate scale, a protractor, a terrain walk of 6000 meters, and the reference.

STANDARD(S): Per the reference, expressing the location as a six-digit grid within 30 seconds after halting and to within 200 meters of the actual location.

PERFORMANCE STEPS:

1. Monitor your location throughout the terrain walk.
2. Orient yourself when halted.
3. Announce the grid coordinate to your position.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 21-26, Map Reading and Land Navigation

DISTANCE LEARNING PRODUCT(S):

- 1. 0381, Land Navigation
- 2. 0385, Land Navigation (Web)

TASK: 0861.01.04 (CORE) NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED

CONDITION(S): While mounted in a vehicle with cross-country capability and given a standard map of the area, a coordinate scale, a protractor, a vehicle with driver, and a compass.

STANDARD(S): Per the references, accurately directing the driver from a known point to a distant point using both terrain association and dead reckoning.

PERFORMANCE STEPS:

- 1. Determine affects of terrain on vehicle movement.
- 2. Determine affects of weather on vehicle movement.
- 3. Navigate by terrain association.
- 4. Navigate by dead reckoning.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 21-26, Map Reading and Land Navigation
- 2. FM 90-3 (HTF), Desert Operations (How To Fight)

DISTANCE LEARNING PRODUCT(S):

- 1. 0381, Land Navigation
- 2. 0385, Land Navigation (Web)

TASK: 0861.01.05 (CORE) LOCATE POSITIONS IN A MOBILE ENVIRONMENT

CONDITION(S): Given a map, a coordinate scale, a protractor, a compass, a vehicle with driver, and the reference.

STANDARD(S): Per the reference, determining the position with a 6 digit grid to within 200 meters of the actual location within 2 minutes of stopping during mounted travel; locating terrain features while on the move to within 200 meters; and identifying a location within 200 meters of the actual location within 10 minutes of stopping after riding in an enclosed vehicle.

PERFORMANCE STEPS:

- 1. Upon being halted, determine your position after viewing surrounding terrain while traveling.
- 2. Upon being halted, determine your position when unable to view surrounding terrain while traveling.
- 3. Determine the positions of terrain features while on the move.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

- 1. FM 21-26, Map Reading and Land Navigation

DISTANCE LEARNING PRODUCT(S):

- 1. 0381, Land Navigation
- 2. 0385, Land Navigation (Web)

ADMINISTRATIVE INSTRUCTIONS: An enclosed vehicle denotes the inability to view the surrounding terrain during travel.

TASK: 0861.01.06 (CORE) DETERMINE LOCATION WITH THE AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given an AN/GVS-5 Laser Range Finder, a compass, a map of the area, plotting equipment, the reference, and two points identifiable on the ground and on the map.

STANDARD(S): Per the references, accurately determining location with a six-digit grid to within 100 meters of the actual location.

PERFORMANCE STEPS:

- 1. Measure distance and azimuth to the first point.
- 2. Plot location from the back azimuth and distance.
- 3. Measure distance and azimuth to the second point.
- 4. Plot location from the back azimuth and distance.
- 5. Using terrain association, check the plot established from the second point and ensure it agrees within +/- 100 meters of the plot from the first point.
- 6. Read the grid from the map.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 21-26, Map Reading and Land Navigation
- 2. TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5

TASK: 0861.01.07 (CORE) DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO KNOWN POINTS

CONDITION(S): Given a complete AN/PAQ-3 Modular Universal Laser Equipment (MULE), two known points, communications with the Fire Direction Center (FDC), a map of the area, and the references.

STANDARD(S): Per the references, accurately determining location with an eight-digit grid to within 10 meters of the actual location and transmitting distance, azimuth and vertical angle to the Fire Direction Center (FDC) within 5 minutes.

PERFORMANCE STEPS:

- 1. Ensure an uninterrupted line of sight to the two known points that are both visible and on the map.
- 2. Set up the Modular Universal Laser Equipment (MULE).
- 3. Measure distance, azimuth, and vertical angle to the first known point.
- 4. Measure distance, azimuth, and vertical angle to the second known point.
- 5. Report this data to the Fire Direction Center (FDC).

6. Record your location and direction to the known point as sent from the Fire Direction Center (FDC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
- 2. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

ADMINISTRATIVE INSTRUCTIONS: Utilizing two known points is the preferred, and most accurate, of the three procedures for determining location with the MULE.

TASK: 0861.01.08 (CORE PLUS) DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST

CONDITION(S): Given a complete AN/PAQ-3 Modular Universal Laser Equipment (MULE), one known point, one burst of a round (High Explosive (HE) or White Phosphorous (WP)), communications with the Fire Direction Center (FDC), a map of the area, and the references.

STANDARD(S): Per the references, accurately determining location with an eight-digit grid to within 10 meters of the actual location and transmitting distance, azimuth, and vertical angle to the Fire Direction Center (FDC) within 5 minutes of the burst.

PERFORMANCE STEPS:

- 1. Set up the Modular Universal Laser Equipment (MULE).
- 2. Measure distance, azimuth, and vertical angle to the first known point.
- 3. Measure distance, azimuth, and vertical angle to the graze burst.
- 4. Ensure the known point and graze burst are separated by at least 300 mils.
- 5. Report this data to the Fire Direction Center (FDC).
- 6. Record your location and direction to the known point as sent from the Fire Direction Center (FDC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
- 2. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7	1.000 EA	1.000 EA	6.000 EA
D544	PROJ 155MM, HE, M107	1.000 EA	1.000 EA	6.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D	1.000 EA	1.000 EA	6.000 EA
N523	PRIMER, PERCUSSION, M82	1.000 EA	1.000 EA	6.000 EA

ADMINISTRATIVE INSTRUCTIONS: Location and reference azimuth accuracy are affected by the accuracy of the firing data. The Fire Direction Center (FDC) should use the most accurate data available.

TASK: 0861.01.09 (CORE PLUS) DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS

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CONDITION(S): Given a complete AN/PAQ-3 Modular Universal Laser Equipment (MULE), two bursts (High Explosive (HE) or White Phosphorous (WP)), communications with the Fire Direction Center (FDC), a map of the area, and the references.

STANDARD(S): Per the references, accurately determining location with an eight-digit grid to within 10 meters of the actual location and transmitting distance, azimuth, and vertical angle to the Fire Direction Center (FDC) within 5 minutes of the second burst.

PERFORMANCE STEPS:

1. Set up the Modular Universal Laser Equipment (MULE).
2. Select the locations for rounds to impact.
3. Ensure the locations are separated by at least 300 mils.
4. Measure distance, azimuth, and vertical angle to each burst.
5. Report this data to the Fire Direction Center (FDC).
6. Record the direction to the second burst.
7. Record your location and corrected azimuth to the second burst as sent from the Fire Direction Center (FDC).
8. Determine the difference between the recorded azimuth and the reported azimuth from the Fire Direction Center (FDC). The difference is positive if the reported azimuth is greater than the recorded azimuth, and negative if the reported azimuth is less than the recorded azimuth.
9. Apply the difference to the initial reference point azimuth.
10. Place the resulting azimuth on the Modular Universal Laser Equipment (MULE) while sighting on the initial reference point.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
2. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7	2.000 EA	2.000 EA	12.000 EA
D544	PROJ 155MM, HE, M107	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D	2.000 EA	2.000 EA	12.000 EA
N523	PRIMER, PERCUSSION, M82	2.000 EA	2.000 EA	12.000 EA

TASK: 0861.01.10 (CORE) DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING SELF-LOCATION PROCEDURE

CONDITION(S): Given a complete AN/PAQ-3 Modular Universal Laser Equipment (MULE), two prearranged points, communications with the Fire Direction Center (FDC), and the references.

STANDARD(S): Per the references, accurately determining location with an eight-digit grid to within 10 meters of the actual location.

PERFORMANCE STEPS:

1. Set up the Modular Universal Laser Equipment (MULE).
2. Send direction, distance, and vertical angle to the two points.

3. Ensure the points are at least 300 mils apart.
4. Specify, to the Fire Direction Center (FDC), which known point is on your left.
5. Obtain the orienting azimuth to one of the known points from the Fire Direction Center (FDC).
6. Plot your location on the map and reorient the Modular Universal Laser Equipment (MULE) on that point with the corrected azimuth.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
 2. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE
-

TASK: 0861.01.11 (CORE) LOCATE POSITION ON A MAP OR GROUND BY RESECTION

CONDITION(S): Given a map, an M2 compass, plotting equipment, two identifiable terrain features both visible and on the map, the requirement to determine your unknown location, and the reference.

STANDARD(S): Per the reference, locating the position by a six-digit grid to within 100 meters of the actual grid and within 5 minutes.

PERFORMANCE STEPS:

1. Locate the two points.
2. Shoot an azimuth to the first point using the compass.
3. Convert to back-azimuths by applying 3200 mils.
4. Place the protractor on the map and make a tickmark to determine the azimuth.
5. Draw a line on the map from the first point along the back azimuth.
6. Repeat STEPS 2 through 5 for the second point.
7. Plot the location where the lines intersect and use terrain association to determine the grid coordinates.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
 2. 0385, Land Navigation (Web)
-

TASK: 0861.01.12 (CORE) DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP

CONDITION(S): Given a scenario involving a Marine in the field during daylight at a known location on the ground, a standard 1:50,000 scale military map of the area, a designated prominent terrain feature, and the reference.

STANDARD(S): Per the reference, and to within half the contour interval.

PERFORMANCE STEPS:

1. Locate the point on the map.
2. Determine the contour interval of the map from the marginal information.

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3. Locate the index contour line nearest the point for which the elevation is being sought.
4. Count the number of contour lines, up or down, that must be crossed to go from the numbered lines to the point.
5. Determine the elevation to the point.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 21-26, Map Reading and Land Navigation

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
2. 0385, Land Navigation (Web)

ADMINISTRATIVE INSTRUCTIONS:

1. If the point is on contour lines, its elevation is that of the contour.
 2. Points less than one-fourth the distance between lines are considered to be the same as the elevation of the nearest line.
 3. Points one-fourth to three-fourths the distance from the lower line are considered to be at an elevation half the contour interval above the lower line.
 4. To estimate the elevation of the top of an unmarked hill, add half the contour interval to the elevation of the highest contour line around the hill.
 5. To estimate the elevation of the bottom of a depression, subtract half the contour interval from the elevation of the lowest contour around the depression.
 6. On maps that do not show elevation and relief in as much detail as needed, supplementary contour lines may be used.
 7. Benchmarks and spot elevations also indicate points of known elevation.
-

TASK: 0861.01.13 (CORE) DETERMINE A POSITION WITH THE AN/PSN-11 PLGR IN THE AVERAGING MODE

CONDITION(S): Given a PLGR with a power supply, an area free of signal masks, a 1:50,000 scale mapsheet, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Turn on the PLGR and allow the PLGR to complete its turn-on sequence.
2. Select the SETUP option on the MENU screens.
3. Change the SETUP mode to CONT.
4. Verify the horizontal datum and vertical datum selected in the PLGR against the mapsheet.
5. Ensure the Almanac Age is current.
6. Verify the PLGR has a valid Cryptographic fill.
7. Remain in the CONT mode until FOM of ONE is obtained.
8. Change the setup mode to AVG.
9. Allow the PLGR to record, ensuring the FOM remains ONE for the entire operation.

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INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0861.01.14 (CORE) PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 PLGR

CONDITION(S): Given a PLGR with a power supply, 1:50,000 scale mapsheet of the area, a trig list, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Navigate to a location in the 2Dfast mode.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5825-291-13, Operations and Maintenance Manual for Satellite Signals Navigation Set AN/PSN-11

PERFORMANCE SUPPORT TOOL(S):

- 1. AN/PSN-11 PLGR Aid
- 2. AN/PSN-11 PLGR Handbook

ADMINISTRATIVE INSTRUCTIONS: Safety: The BA-5800 lithium battery is dangerous if mishandled.

TASK: 0861.01.15 (CORE PLUS) CONDUCT BATTLEFIELD REPORTING

CONDITION(S): Given a tactical scenario, the requirement to conduct battlefield reporting, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Determine which agencies require information from your team.
- 2. Determine what information is required by those agencies.
- 3. Determine the appropriate means to transmit the required reports.
- 4. Transmit the appropriate reports.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence

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2. 0332, Reconnaissance Marine
3. 0335, Infantry Patrolling
4. 5714, Nuclear, Biological and Chemical Reconnaissance and Contamination Avoidance

PERFORMANCE SUPPORT TOOL(S):

1. Chemical Warfare
 2. Forward Air Controller
-

DUTY AREA 02 - COMMUNICATIONS

TASK: 0861.02.01 (CORE) ESTABLISH/ENTER AND LEAVE A RADIO TELEPHONE NET

CONDITION(S): Given a scenario involving a tactical or nontactical situation, under all weather conditions, in an NBC environment (if desired), an FM radio set installed and operational, Communications-Electronic Operating Instruction publication (CEOI), a distant operational station serving as the Net Control Station (NCS), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Establish a radio telephone net.
 - a. Extract appropriate call signs, suffixes, and frequency from the unit Communications-Electronic Operating Instruction publication (CEOI).
 - b. Prepare and operate the appropriate radio set.
 - c. Identify the net structure and determine the answering sequence.
2. Enter a radio telephone net.
 - a. Use abbreviated call signs except when directed by the Net Control Station (NCS) to use full call signs.
 - b. Authenticate when challenged by Net Control Station (NCS).
 - c. If you fail to answer a multiple or collective call sign in sequence, wait until all other stations have answered; then answer.
3. Leave and close a net.
 - a. Request permission to leave the net from the Net Control Station (NCS).
 - b. Inform the Net Control Station (NCS) of the reason for leaving the net.
 - c. Authenticate, upon direction of the Net Control Station (NCS), before leaving the net.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ACP 125, US SUPP 1, Allied Communication Publication
2. CEOI, Communications-Electronic Operating Instructions
3. FM 24-1, Combat Communications
4. FM 24-18, Communications Techniques
5. TM 11-5820-890-10-1, SINCGARS Operator's Manual

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DISTANCE LEARNING PRODUCT(S):

- 1. 2515, Antenna Construction and Propagation of Radio Waves
- 2. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0861.02.02 (CORE PLUS) ENCODE/DECODE/AUTHENTICATE USING THE NUMERAL CIPHER/AUTHENTICATION SYSTEM

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, in an NBC environment (if desired), current Numeral Cipher/Authentication System, map coordinates to be encoded, encoded numerical information to be decoded, authentication challenge for reply, pencil, paper, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Find the line for encryption.
 - a. Randomly select any two letters for SET INDICATOR (SI).
 - b. Find the first letter of the SO in the LINE INDICATOR column.
 - c. Find the second SI letter. Use the letter to the right of SI letter as set letter for encryption.
 - d. Find the SET LETTER in the LINE INDICATOR column. This line will be used to encrypt up to 15 characters.
- 2. Encrypt grid zone letters provided by the supervisor.

NOTE: Grid zone letters will be included in messages when they are necessary to the understanding of such messages. NO OTHER LETTERS WILL BE ENCRYPTED. In order to preclude misunderstanding, a statement may be made that grid zone letters are included in the message.

- 3. Encrypt numbers provided by the supervisor.
- 4. Prepare for transmission.
- 5. Decrypt grid zone letters and numbers.
- 6. Perform challenge and reply authentication.
 - a. Challenge a station using authentication.
 - b. Reply to a station using authentication.
 - c. Perform transmission authentication.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. Applicable Tactical OPSCODE (AKAC 130, etc.)

DISTANCE LEARNING PRODUCT(S):

- 1. 2525, Communications Security

TASK: 0861.02.04 (CORE) SEND AND RECEIVE RADIO TRANSMISSIONS USING PROPER RADIO TELEPHONE PROCEDURES

CONDITION(S): Given an FM-VHF radio, an assigned net, a frequency, a call sign, message pad, pencil, a message format, the references, and appropriate information pertaining to the types of report.

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ENCLOSURE (3)

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Send the message.
 - a. Listen before transmitting.
 - b. Ensure message is clear and concise.
 - c. Use abbreviated call signs, unless otherwise directed.
 - d. Speak clearly, slowly, and enunciate each word. Do not key the handset continuously for more than 3-5 seconds. Break the message text into portions that are less than 3-5 seconds each.
 - e. Employ proper radio procedures.
 - (1) Use authentication.
 - (2) Use prowords.
 - (3) Use approved codes.
 - f. Assume the enemy is listening.
 - g. Notify higher headquarters, by alternate means, if jamming occurs by submitting a MIJI report.
2. Take immediate action if unable to establish communications.
3. Properly copy all incoming messages in message book.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ACP 125(D), Communication Instructions for Radio Telephone Procedures
2. FM 24-18, Communications Techniques

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
2. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0861.02.05 (CORE PLUS) TRANSMIT A MESSAGE UTILIZING NATO FORMAT

CONDITION(S): Given a radio set, a receiving station, call signs, frequencies, a completed NATO format, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Establish communications with the receiving station.
2. Transmit the NATO formatted message.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ATP-38, Amphibious Operations
-

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TASK: 0861.02.06 (CORE PLUS) DRAFT A MESSAGE USING NATO FORMAT

CONDITION(S): Given the appropriate information, a NATO message format, the appropriate equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Evaluate information.
2. Place information in the proper lines of the NATO message.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ATP-38, Amphibious Operations
-

TASK: 0861.02.07 (CORE) OPERATE AN FM RADIO SET AN/PRC-119

CONDITION(S): Given an FM radio set AN/PRC-119 with accessory bag and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Insert BA-5590 into radio.
2. Attach the appropriate antenna onto radio.
3. Input the correct frequency into the radio.
4. Complete communications check with the appropriate station.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 24-18, Communications Techniques
2. TM 11-5820-890-10-1, SINCGARS Operator's Manual

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
 2. 2525, Communications Security
 3. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
-

TASK: 0861.02.08 (CORE PLUS) INSTALL AN/VRC-88 RADIO SET

CONDITION(S): Given an AN/VRC-88 radio set, a frequency, a designated vehicle with appropriate mount installed, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Place AN/VRC-88 in mount.
2. Connect cables.
3. Apply power.
4. Conduct operational check.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

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REFERENCE(S):

- 1. TM 11-5820-890-10-1, SINCGARS Operator’s Manual

DISTANCE LEARNING PRODUCT(S):

- 1. 2515, Antenna Construction and Propagation of Radio Waves
- 2. 2525, Communications Security
- 3. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
- 4. 3530, Incidental Motor Vehicle Operator
- 5. 3532, Incidental Motor Vehicle Operator (CD)

TASK: 0861.02.09 (CORE PLUS) OPERATE A AN/VRC-88 RADIO SET

CONDITION(S): Given an AN/VRC-88 radio set, an assigned station on a radio net, frequency, call sign, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Place the frequency on the radio.
- 2. Determine squelch setting for the receiver-transmitter and align the squelch control to the appropriate setting, as listed in the unit Standing Operating Procedures (SOP).
- 3. Conduct operational check.
- 4. Establish loud and clear communication on the net.
- 5. Troubleshoot problems.
- 6. Restore the circuit.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5820-890-10-1, SINCGARS Operator’s Manual

DISTANCE LEARNING PRODUCT(S):

- 1. 2515, Antenna Construction and Propagation of Radio Waves
- 2. 2525, Communications Security
- 3. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
- 4. 3530, Incidental Motor Vehicle Operator
- 5. 3532, Incidental Motor Vehicle Operator (CD)

TASK: 0861.02.10 (CORE PLUS) INSTALL AN/MRC-145 RADIO SET

CONDITION(S): Given an AN/MRC-145 radio set, frequency, a designated site, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Install the equipment.
- 2. Connect cables.

- 3. Erect antenna.
- 4. Apply power.
- 5. Conduct operational check.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5820-890-10-1, SINCGARS Operator’s Manual

DISTANCE LEARNING PRODUCT(S):

- 1. 2515, Antenna Construction and Propagation of Radio Waves
- 2. 2525, Communications Security
- 3. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
- 4. 3530, Incidental Motor Vehicle Operator
- 5. 3532, Incidental Motor Vehicle Operator (CD)

TASK: 0861.02.11 (CORE PLUS) OPERATE AN AN/MRC-145 RADIO SET

CONDITION(S): Given an AN/MRC-145 radio set, an assigned station on a VHF radio net, frequency, call sign, and reference.

STANDARD(S): Per the reference, maintaining reliable communication with other stations on the net.

PERFORMANCE STEPS:

- 1. Conduct operational check.
- 2. Establish loud and clear communication on the net.
- 3. Troubleshoot problems.
- 4. Restore the circuit.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5820-890-10-1, SINCGARS Operator’s Manual

DISTANCE LEARNING PRODUCT(S):

- 1. 2515, Antenna Construction and Propagation of Radio Waves
- 2. 2525, Communications Security
- 3. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
- 4. 3530, Incidental Motor Vehicle Operator
- 5. 3532, Incidental Motor Vehicle Operator (CD)

TASK: 0861.02.15 (CORE) OPERATE AN AN/PRC-104 RADIO SET

CONDITION(S): Given an AN/PRC-104 radio set, an assigned station on a HF radio net, frequency, call sign, and the reference.

STANDARD(S): Per the reference.

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PERFORMANCE STEPS:

1. Install batteries.
2. Attach antenna.
3. Attach handset.
4. Set controls for mode, antenna, select, frequency, volume, and side band.
5. Apply power.
6. Conduct operational check.
7. Establish loud and clear communications on the net.
8. Troubleshoot problems.
9. Restore the circuit.
10. Perform operator level preventive maintenance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 07748A-12/1, Operator's Manual AN/PRC-104

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
2. 2525, Communications Security
3. 2532, HF/UHF Field Radio Equipment

TASK: 0861.02.16 (CORE PLUS) INSTALL AN/MRC-138 RADIO SET

CONDITION(S): Given an AN/MRC-138 radio set, frequency, designated site, hazardous warning signs, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Install the equipment.
2. Ground the radio set.
3. Connect cables.
4. Install AT-1011.
5. Place warning signs.
6. Apply power.
7. Conduct operational check.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 07749A/07743A-12-1, Operator's Manual Radio Set AN/MRC-138

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
2. 2525, Communications Security

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- 3. 2532, HF/UHF Field Radio Equipment
- 4. 3530, Incidental Motor Vehicle Operator
- 5. 3532, Incidental Motor Vehicle Operator (CD)

TASK: 0861.02.17 (CORE PLUS) OPERATE AN AN/MRC-138 RADIO SET

CONDITION(S): Given an AN/MRC-138 radio set, an assigned station on an HF radio net, frequency, call sign, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Conduct operational check.
- 2. Establish loud and clear communication on the net.
- 3. Troubleshoot problems.
- 4. Restore the circuit.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 07749A/07743A-12-1, Operator's Manual Radio Set AN/MRC-138

DISTANCE LEARNING PRODUCT(S):

- 1. 2515, Antenna Construction and Propagation of Radio Waves
- 2. 2525, Communications Security
- 3. 2532, HF/UHF Field Radio Equipment
- 4. 3530, Incidental Motor Vehicle Operator
- 5. 3532, Incidental Motor Vehicle Operator (CD)

TASK: 0861.02.18 (CORE PLUS) PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET

CONDITION(S): Given a TSEC/KY-99 with batteries, cryptographic hardware and software, designated radio equipment, a distant secure station, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Install batteries.
- 2. Emplace the equipment.
- 3. Connect TSEC/KY-99 to designated radio equipment.
- 4. Apply power.
- 5. Load cryptographic software.
- 6. Conduct operational check.
- 7. Conduct a communications check on a secure circuit with a distant station.
- 8. Provide security.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

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REFERENCE(S):

1. TM 11-5810-256-OP-2, Operating Procedures for Com Sec Equipment

DISTANCE LEARNING PRODUCT(S):

1. 2525, Communications Security
 2. 2532, HF/UHF Field Radio Equipment
-

TASK: 0861.02.19 (CORE) ERECT OE-254 ANTENNA

CONDITION(S): Given an OE-254 antenna, designated site, appropriate equipment and tools, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Select the antenna site.
 - a. Ensure the area is clear of obstructions such as power lines.
 - b. If there are power lines near the site, the antenna must be no closer than twice the height of the antenna.
2. Place the Base Plate, with the cleats up, where the antenna is to be erected.
3. Drive the Swivel Stake through the center hole of the Base Plate with the mallet.
4. Drive the Guy Stakes at a 45 degree angle into the earth facing away from the mast at a distance of 15 feet from the center of the cleats on the Base Plate. The three stakes must be 120 degrees apart. The distance of 15 feet is equal to the length of six mast sections fitted together.
5. Tie the flexible end of each of the three Guy Straps around the three ground stakes. Use a "cowhitch" to ensure tension on the metal ring will hold the Guy Straps securely.
6. Assemble five additional mast sections (AB-35) and join them with the six already assembled, inserting one Guy Plate between the sixth and seventh sections of the mast assembly.
7. Place the second Guy Plate over the end of the eleventh section of the mast assembly, and add the final mast section.
8. Rotate the mast assembly about the Swivel Stake until it's free and is midway between two of the Guy Stakes.
9. Assemble the vertical element. (Check frequency for the number of elements required.)
10. Assemble the ground plans elements. (Check frequency for the number of elements required).
11. Insert the vertical and ground plane elements into the sockets of the antenna base MP-68 with the vertical elements going into the socket at the top of the antenna base.
12. Place the antenna base over the top mast section of the previously assembled mast and tighten the vise. Position the MP-68, ensuring two of the ground plane elements rest on the ground.
13. Connect the coaxial cable to the antenna base. Run the rest of the cable along the mast sections. Just below the connector on the MP-68, make a Drip Loop and tape the coaxial cable just below the loop and approximately every 5 feet thereafter, until approximately 4 feet from the ground. This is done to relieve tension on the cable and the MP-68.

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14. Turn the Guy Plates so one hole of each is uppermost.
15. Attach two Guy Ropes securely to the side holes of the lower Guy Plate. Pass these Guy Ropes through their respective side Guy Strap rings and then through the holes in the appropriate Base Plate cleats. Form a slip knot in each Guy Rope and pull the free ends through the loops of the slip knots.
16. Snap the third Guy Rope in the third hole of the lower Guy Plate and lay the Guy Rope along the mast toward the third Guy Stake.
17. Attach the three Guy Ropes to the upper Guy Plate in the same manner.
18. To raise the mast, two men will coordinate the movements. One man stands near the Swivel Base and in line with the third Guy Stake. The second man stands at the top of the mast. The first man bows the top of the mast by pulling the free Guy Lines taut. At the same time, the second man, having raised the tip end of the mast to shoulder height, walks toward the Base Plate, pushing the mast upwards. Concurrently, the first man walks backwards towards the third Guy Stake pulling the mast slowly and firmly erect.
19. When the mast is in the vertical position, adjust and tighten all the Guy Ropes.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. TM 11-5985-357-13, Ant Group OE-254/GRC

DISTANCE LEARNING PRODUCT(S):

1. 2515, Antenna Construction and Propagation of Radio Waves
2. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0861.02.20 (CORE) INSTALL AND OPERATE RADIO SET CONTROL GROUP AN/GRA-39 AND/OR AN/PRC-119C FOR REMOTE OPERATION

CONDITION(S): Given a tactical or nontactical situation, under any weather condition, an NBC environment (if required), radio set control group AN/GRA-39 and/or AN/PRC-119C radio set installed and operational, battery BA-30 or BA-5590, field wire on reel(s) (up to 2 miles), tool equipment TE-33, designated remote site for the radio, call signs and operating frequency from the CEOI.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Install batteries in AN/GRA-39.

NOTE: If the cover is slid into position, or the clamps are closed one at a time, the batteries can be pushed away from the contacts.

2. Prepare local control C-2329.
 - a. Connect C-2329 control cable to the RT audio connector.
 - b. Connect field wire to the line binding posts.
 - c. Set C-2329 controls.
3. Prepare remote control C-2328.
 - a. Connect field wire to the binding posts.
 - b. Connect the handset.
 - c. Set C-2328 controls.
4. Conduct a radio check with the distant station.

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- 5. Troubleshoot problems.
- 6. Set AN/PRC-119C to the remote mode.
- 7. Attach wires to the bottom of radio.
- 8. Establish communications with the remote radio.
- 9. Establish communications with a distant station.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ACP 125, US SUPP 1, Allied Communication Publication
- 2. TM 11-5820-477-12, Operator’s and Organizational Maintenance Manual: Radio Set Control Groups AN/GRA-39, AN/GRA-39A, and AN/GRA-39B
- 3. TM 11-5820-890-10-1, SINCGARS Operator’s Manual

DISTANCE LEARNING PRODUCT(S):

- 1. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)

TASK: 0861.02.21 (CORE PLUS) OPERATE AND MAINTAIN A FIELD PHONE

CONDITION(S): Given a TA-1/PT or TA-312/PT telephone set, batteries, pliers or knife, and a preinstalled field wire line.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Install the batteries.
- 2. Select a site for the telephone set.
- 3. Connect the telephone to the line.
 - a. Strip one inch of insulation from the wires.
 - b. Secure the wire.
 - c. Insert wire into binding posts.
- 4. Adjust buzzer.
- 5. Make a call on the TA-1/PT.
 - a. Press the generator lever 4 to 5 times.
 - b. Ensure that the press to talk switch is not pressed in when ringing.
 - c. Press the press-to-talk switch to talk and release to listen.
- 6. Make a call on a TA-312/PT.
 - a. Ensure EXT-IN switch is in the INT position.
 - b. Ensure the handset is firmly seated.
 - c. Turn hand crank rapidly a few turns.
 - d. Remove handset and wait for the called party to answer.
 - e. Press the press-to-talk switch to talk and release to listen.
- 7. Return the handset when terminating the call. If the call was through a switchboard, turn the handcrank to signal the switchboard operator.

- 8. Maintain the telephone set.
 - a. Ensure the set is complete and intact.
 - b. Ensure the set is properly installed.
 - c. Ensure that case, panel, connector contacts, controls, cord, and handset are clean and free from fungus or corrosion.
 - d. Inspect the battery compartment for cleanliness, and ensure that there is no foreign matter.
 - e. Check conditions of batteries.
 - f. Ensure the handset is set firmly in retaining cradle and that retaining cradle springs maintain proper tension.
 - g. Inspect binding posts to ensure that connections are tight.
 - h. Check the cord on handset for cracks or breaks.
 - i. Ensure that all control knobs and switches operate properly without binding.
 - j. Initiate a call and check the operation of the telephone set.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCIO P1500.44C, Battle Skills Training/Essential Skills Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 2551, Field Wire Equipment and Procedures

TASK: 0861.02.22 (CORE PLUS) EMPLOY THE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)

CONDITION(S): Given an AN/PPN-19 transponder set (radar beacon), a suitable location to set-up, a frequency, a code, and an order to place the set into operation.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Emplace beacon at designated location.
- 2. Activate the beacon.
 - a. Enter your assigned code into the set and select mode of operation.
 - b. Report to the appropriate agency when the set is activated.
- 3. Change batteries if required.
- 4. Troubleshoot the radar beacon as required.
- 5. Provide operator maintenance as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. User's Manual for AN/PPN-19 Radar Beacon
- 2. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

ADMINISTRATIVE INSTRUCTIONS: If possible, ensure the correct frequency band is set in the beacon before leaving the ship.

TASK: 0861.02.23 (CORE) MAINTAIN COMMUNICATIONS EQUIPMENT

CONDITION(S): Given designated equipment, cleaning material, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Inventory the equipment per SL-3.
2. Clean the equipment.
3. Perform operation checks.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 24-18, Communications Techniques

DISTANCE LEARNING PRODUCT(S):

1. 0410, MIMMS (AIS)
 2. 0416, The Marine Corps Publications and Directives System
 3. 2532, HF/UHF Field Radio Equipment
 4. 2538, Single Channel Ground-Airborne Radio System (SINCGARS)
 5. 2551, Field Wire Equipment and Procedures
-

TASK: 0861.02.24 (CORE PLUS) IDENTIFY ELECTRONIC COUNTERMEASURES (ECM) AND IMPLEMENT ELECTRONIC COUNTER-COUNTERMEASURES (ECCM)

CONDITION(S): Given a radio set, applicable operator's technical manual, and a CEOI extract.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine if ECM are being employed.
 - a. Check for accidental or unintentional interference.
 - b. Check for intentional interference.
2. Initiate operator's procedures.
 - a. Check the equipment ground to ensure that the interference is not caused by a buildup of static electricity.
 - b. Disconnect the antenna.
 - c. Identify the type of noise.
 - d. Move the receiver or reorients the antenna, if possible, and listens or looks for variations in the strength of the disturbance.
 - e. Tune the receiver a few kilohertz above or below the normal frequency. If such detuning causes the intensity of the interfering signal to drop sharply, it can be assumed that the interference is the result of spot jamming.
3. Identify jamming signals.
4. Employ antijamming measures.

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NOTE: Antijamming measures have been designed to allow radio operators to work effectively through intentional interference. Regardless of the nature of the interfering signal, radio operators WILL NOT reveal in the clear the possibility or success of enemy jamming.

- 5. Use high power if it is an option.
- 6. Minimize transmissions.
- 7. Talk in short bursts.
- 8. Submit a MIJI 1 report.
- 9. Continue to operate.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. AR 105-3, Reporting Meaconing, Intrusion, Jamming and Interference of Elctromagnetic Systems
- 2. CEOI, Communications-Electronic Operating Instructions
- 3. FM 24-1, Combat Communications
- 4. FM 24-33, Communications Tech Electronic Counter-Countermeasures

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
- 2. 2515, Antenna Construction and Propogation of Radio Waves
- 3. 2525, Communications Security

TASK: 0861.02.25 (CORE PLUS) PREPARE/SUBMIT OPERATOR’S MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI) REPORT

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, an NBC environment (if desired), the requirement to operate in a radio net, an interfering signal of undesignated origin, homing loop antenna AT-784/PRC (if available), compass or terrain oriented map (if available), watch or other method of determining time, pencil and paper, Numerical Cipher/Authentication System, the references, MIJI 1 report format, and assistance.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Prepare the MIJI 1 report.

NOTES: If the MIJI 1 report is submitted over nonsecure radio, items 1, 2, 3, 4, and 6 must be encrypted using the Numeral Cipher/Authentication System. Write the report on a separate sheet of paper (not in the CEOI).
- 2. Submit the MIJI 1 report.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. AR 105-3, Reporting Meaconing, Intrusion, Jamming and Interference of Elctromagnetic Systems
- 2. CEOI, Communications-Electronic Operating Instructions
- 3. FM 24-33, Communications Tech Electronic Counter-Countermeasures

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DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
 2. 2525, Communications Security
-

DUTY AREA 03 - OBSERVED FIRE PROCEDURES

TASK: 0861.03.01 (CORE) SELECT AN OBSERVATION POST AND PREPARE TO USE IT

CONDITION(S): Given a compass, binoculars, a map of the target area, communications equipment, an information sheet containing a situation overlay and a zone of observation.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Perform map reconnaissance.
2. Perform physical reconnaissance.
3. Select an OP location which provides the best observation of the target area.
4. Take advantage of the terrain, existing cover, and concealment, while avoiding landmarks and prominent terrain features.
5. Use concealed access and exit routes to the position to occupy the OP without detection from the target area.
6. Occupy the OP.
7. Establish communications.
8. Report the OP location and field observation to the FDC.
9. Camouflage and cover the position.
10. Select an alternate OP.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
 2. 0332, Reconnaissance Marine
 3. 0335, Infantry Patrolling
 4. 0381, Land Navigation
 5. 0385, Land Navigation (Web)
 6. 0861, Basic Forward Observation Procedures
-

TASK: 0861.03.02 (CORE) PREPARE AN OBSERVATION POST FOR USE WHILE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) EQUIPPED

CONDITION(S): Given a map of the target area and an AN/PAQ-3 MULE with components, an information sheet containing a situation overlay and a zone of observation.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Consider mutual support and coordination within the maneuver element if more than one laser designator is in use.
2. Ensure your position has an uninterrupted line of sight to the target area, provides cover and concealment, facilities communications, and is near the expected avenues of approach and likely positions of high priority targets.
3. Set up and operationally check the MULE.
4. Determine position as accurately as possible, and keep the FDC informed of the location.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
3. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

ADMINISTRATIVE INSTRUCTIONS: The MULE will be treated as a loaded weapon, never pointed at friendly personnel, and always pointed downrange.

TASK: 0861.03.03 (CORE) PLACE THE OBSERVED FIRE (OF) FAN ON A MAP

CONDITION(S): Given a map, an OF fan (GTA 6-7-3), a compass, binoculars, and a zone of observation.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Place the vertex of the fan over the observer's location.
2. Place the center radial over the center of the observer's sector of responsibility.
3. Ensure a radial line is parallel to a grid line.
4. Label the radial lines.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. GTA 6-7-3, OF Fan
3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.04 (CORE) DETERMINE DIRECTION TO TWO TARGETS

CONDITION(S): Given a map, an OF fan, a compass, binoculars, two targets, pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine direction to the targets using the compass.

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2. Express directions to the targets to the nearest 10 mils.
3. Complete steps 1 and 2 within 1 minute.
4. Use binoculars or an AN/GVS-5 and determine direction to the targets by measuring from reference points.
5. Express directions to the targets to the nearest 10 mils.
6. Complete steps 4 and 5 within 1 minute.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
2. 0385, Land Navigation (Web)

TASK: 0861.03.05 (CORE) CONSTRUCT A TERRAIN SKETCH

CONDITION(S): Given a compass, binoculars, a pad of paper, pencils, and an information sheet containing a zone of observation and responsibility.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Draw a panoramic representation of the terrain within the zone of observation.
 - a. Draw the skyline first.
 - b. Draw intermittent crests.
 - c. Draw all natural terrain features.
 - d. Draw all man-made objects.
2. Determine and label the direction to all reference points.
3. Update as time permits.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.06 (CORE PLUS) PREPARE A VISIBILITY DIAGRAM

CONDITION(S): Given the reference, a map, your location, a compass, binoculars, a pad of paper, pencils, and an information sheet containing a zone of observation and responsibility.

STANDARD(S): Per the reference, accurately depicting areas that are both visible and not visible from your location.

PERFORMANCE STEPS:

1. Plot your location.
2. Draw lines from your location out to the farthest limits of your zone of observation and responsibility.
3. Label the radial lines with the correct direction.
4. Construct a profile along each line marking points that are not visible.
5. Connect the points and shade the areas between these points, graphically showing the areas that cannot be seen from your location.
6. Label the diagram and send it to the Fire Support Coordination Center (FSCC), as required.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0332, Reconnaissance Marine
3. 0861, Basic Forward Observation Procedures

TASK: 0861.03.07 (CORE) LOCATE A TARGET BY GRID COORDINATES

CONDITION(S): Given equipment organic to the Forward Observer (FO) Team and the references.

STANDARD(S): Accurately announcing the six-digit grid coordinate of the identified target within a 200-meter tolerance and within 50 seconds.

PERFORMANCE STEPS:

1. Orient the map.
2. Use terrain association to refine and determine the grid.
3. Announce the grid coordinates.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
2. 0385, Land Navigation (Web)
3. 0861, Basic Forward Observation Procedures

TASK: 0861.03.08 (CORE) LOCATE A TARGET BY POLAR PLOT

CONDITION(S): Given equipment organic to the Forward Observer (FO) Team and the references.

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STANDARD(S): Within 50 seconds after identification and within 200 meters of the actual location. Express direction to the nearest 10 mils and within 50 mils of the actual direction. Express distance to the nearest 100 meters. Express target altitude to the nearest 5 meters.

PERFORMANCE STEPS:

1. Determine and announce the direction to the target.
2. Determine the distance to the target.
3. Determine the vertical shift (up or down) to the target. If it is less than 30 meters, ignore the vertical shift.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0381, Land Navigation
 2. 0385, Land Navigation (Web)
 3. 0861, Basic Forward Observation Procedures
-

TASK: 0861.03.09 (CORE) LOCATE A TARGET BY SHIFT FROM A KNOWN POINT

CONDITION(S): Given the references, equipment organic to an Forward Observer (FO) Team, and a known point.

STANDARD(S): Announcing the target location within 50 seconds after identification and locating the target to within 200 meters of the actual location. Express direction to the nearest 10 mils and within 50 mils of the actual direction. Express right or left corrections to the nearest 10 meters and range corrections to the nearest 100 meters. Express target altitude to the nearest 5 meters.

PERFORMANCE STEPS:

1. Determine the observer-target direction.
2. Use the mil relation formula to determine the lateral shift from the known point to the target.
3. Announce the lateral shift.
4. Determine and announce the range change from the known point to the target.
5. Determine and announce the vertical shift (up or down) from the known point to the target. Ignore the vertical shift if the difference is less than 30 meters.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures
-

TASK: 0861.03.10 (CORE) MEASURE ANGULAR DEVIATION WITH YOUR HAND

CONDITION(S): Given the need to make a lateral shift in the target area, a suspected target near a known point or reference point, and your hand.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Face the target extending the arm fully, with the palm pointing toward the target area, whenever measuring angles.
2. Express the angles formed by the various hand and finger combinations (1, 2, 3, and 4 finger combinations, fist and hand combinations) to the nearest 10 mils.
3. Announce direction to the target.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS: The Marine must "calibrate" his fingers/hands prior to initiating missions in the field. This is done by performing the steps above in relation to two fixed objects. The reticule pattern in the binoculars of the team's equipment is then used to determine actual measurements for the Marine's fingers/hands. Express direction to the nearest 10 mils and within 50 mils of the actual direction.

TASK: 0861.03.11 (CORE) CONDUCT AN ADJUST FIRE MISSION

CONDITION(S): Given the references and equipment organic to the Forward Observer (FO) Team.

STANDARD(S): Completing a call for fire within 60 seconds of target identification, announcing subsequent corrections within 15 seconds of the burst (deviation to the nearest 10 meters, range to the nearest 100 meters, and HOB corrections to the nearest 5 meters), and entering fire for effect (FFE) within +/-50 meters of the target using no more than three adjusting rounds. Coordinates must be within 200 meters of the actual target location.

PERFORMANCE STEPS:

1. Transmit the complete Call For Fire (CFF).
2. Determine and transmit OT direction with or before the first correction, when using the grid method of target location.
3. Transmit subsequent corrections in the proper sequence.
4. Enter Fire For Effect (FFE).
5. Transmit refinement data (if any), Record as Target (if desired), End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

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AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

ADMINISTRATIVE INSTRUCTIONS:

- 1. If the PE in range is greater than or equal to 30 meters, the observer may call FFE when a 200 meter bracket is split.
- 2. When an FO is MULE equipped, one round adjust missions should be standard.

TASK: 0861.03.12 (CORE) OPERATE THE AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given an AN/GVS-5 laser range finder, a designated target, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Remove the lens cover.
- 2. Set the PWR switch to ON.
- 3. Aim the laser at the target.
- 4. Lase the target.
- 5. Announce the range.
- 6. Use the minimum range setting when appropriate.
- 7. Set the PWR switch to OFF.
- 8. Complete steps 1 through 7 in sequence.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5

ADMINISTRATIVE INSTRUCTIONS: Applicable laser safety guidelines must be adhered to prior to lasing the target.

TASK: 0861.03.13 (CORE) REQUEST AND ADJUST FIRE WITH THE AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given an AN/GVS-5 laser range finder, a compass, a map, a designated target, communications with the FDC, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine observer target direction.
2. Remove the lens cover.
3. Set the PWR switch at ON.
4. Aim the laser at the target.
5. Lase the target.
6. Express range to the target.
7. Use the minimum range setting when appropriate or when the multiple target warning light illuminates.
8. Transmit the call for fire using polar plot data.
9. Determine range to burst. Send appropriate deviation and range corrections.
10. Fire for effect.
11. Transmit refinement, EOM, and surveillance.
12. Set the PWR switch at OFF.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
3. TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7	2.000 EA	2.000 EA	12.000 EA
D544	PROJ 155MM, HE, M107	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D.	2.000 EA	2.000 EA	12.000 EA
N523	PRIMER, PERCUSSION, M82	2.000 EA	2.000 EA	12.000 EA

TASK: 0861.03.14 (CORE) PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given an AN/GVS-5 laser range finder, cleaning equipment, preserving material, and the reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Clean exposed glass surfaces with cleaning compound and lens cleaning tissue.
2. Perform before-operation check and services.
3. Perform during-operation checks and services.
4. Perform after-operation check and services.
5. Perform the three troubleshooting steps.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. TM 11-5860-201-10, Laser Infrared Observation Set AN/GVS-5

DISTANCE LEARNING PRODUCT(S):

- 1. 0410, MIMMS (AIS)
- 2. 0416, The Marine Corps Publications and Directives System

TASK: 0861.03.15 (CORE) PREPARE THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) FOR OPERATION

CONDITION(S): Given an AN/PAQ-3 MULE with components and a map.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Set up and course level the STTM.
- 2. Connect the STTM, NFM, and LDRM.
- 3. Fine level the MULE.
- 4. Perform a pre-operational check on the MULE. Check for indications of low battery voltage, over-temperature condition, and low or no laser output by checking the malfunction indicator in the LDRM eyepiece.
- 5. Insert grid convergence values into the NFM. Enter either the grid convergence angle or easting and northing coordinates. Entering coordinates is preferred.
- 6. Use direction determined by NFM to orient STTM.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
- 2. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

ADMINISTRATIVE INSTRUCTIONS: The MULE will be treated as a loaded weapon, never pointed at friendly personnel, and always pointed downrange.

PMCS will be at an absolute minimum. The MULE will not require alignment, adjustment, calibration, or lubrication during normal operation. The MULE will be operated until a malfunction occurs and then the appropriate corrective maintenance will be initiated. The only preventive maintenance requirements are periodic servicing at the organizational level.

TASK: 0861.03.16 (CORE) CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)

CONDITION(S): Given an AN/PAQ-3 MULE, a map, a designated target and communications with the FDC.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Assume a stable sitting or kneeling position.
- 2. Enter the proper pulse repetition frequency (PRF) code for laser guided munitions.

- 3. When the target appears, keep the viewing eye in the same relative position with respect to the eyepiece.
- 4. Determine if the line of sight is interfered with by obstructions which are likely to reflect the laser energy and generate false distances. Use the minimum range setting adjustment if this condition exists.
- 5. Lase the center of the target. If lasing for munitions, lase "high center" so as not to hit the road wheels or slope of the target.
- 6. Determine range, azimuth, VA to the target.
- 7. Transmit the call for fire.
- 8. Track moving targets by applying smooth horizontal and vertical corrections to the handle on the traversing unit.
- 9. Lase the target for the appropriate duration to provide terminal guidance for the munition, e.g., lase for the last 13 seconds of the time of flight for the copperhead round.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. DB-9-86, Laser Designators, Rangefinders, Seekers, and Guided Munitions
- 2. FM 6-30, Observed Fire Procedures
- 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
- 4. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	2.000 EA	2.000 EA	12.000 EA
D544	PROJ 155MM, HE, M107	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D.	2.000 EA	2.000 EA	12.000 EA
N523	PRIMER, PERCUSSION, M82	2.000 EA	2.000 EA	12.000 EA

ADMINISTRATIVE INSTRUCTIONS: Obtain target information within 15 seconds after identifying the target, announcing range to within 10 meters, azimuth to within 2 mils, and the vertical angle within 5 mils of the actual target location. The MULE will be treated as a loaded weapon, never pointed at friendly personnel, and always pointed downrange.

TASK: 0861.03.17 (CORE PLUS) CONDUCT A SUPPRESSION MISSION ON A PLANNED TARGET

CONDITION(S): Given planned targets (that are on the target list), the need to suppress one of those targets, and communications with the FDC.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Prepare and transmit the CFF within 30 seconds.
- 2. Determine and transmit correction data if not within 200 meters.
- 3. Transmit refinement, EOM, and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7	4.000 EA	4.000 EA	24.000 EA
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D	4.000 EA	4.000 EA	24.000 EA
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0861.03.18 (CORE) CONDUCT AN IMMEDIATE SUPPRESSION MISSION

CONDITION(S): Given equipment organic to the Forward Observer (FO) Team, a target that needs to be immediately suppressed, and the references.

STANDARD(S): Correctly transmitting a Call For Fire (CFF) within 60 seconds of target identification and ensuring initial target location is within 300 meters of the actual target location.

PERFORMANCE STEPS:

- 1. Locate the target.
- 2. Prepare and transmit the Call For Fire (CFF).
- 3. If required, transmit subsequent corrections within 15 seconds of HE round impact. (Make bold subsequent corrections to get rounds immediately on target.)
- 4. Transmit final refinement data, End of Mission (EOM), and the effects observed (after the desired effect is obtained).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D or N464 VT M732 or N463 VT M728	4.000 EA	4.000 EA	24.000 EA
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

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DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.19 (CORE) CONDUCT A FIRE FOR EFFECT (FFE) MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Locating a target within +/-50 meters of the actual location and transmitting the Call For Fire (CFF) within 2 minutes of target identification.

PERFORMANCE STEPS:

- 1. Determine the target location.
- 2. Prepare and transmit the Call For Fire (CFF).
- 3. Transmit refinement data (if any), Record as Target (if desired), End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	4.000 EA	4.000 EA	24.000 EA
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	4.000 EA	4.000 EA	24.000 EA
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.20 (CORE) CONDUCT AN ILLUMINATION MISSION

CONDITION(S): Given equipment organic to an Forward Observer (FO) Team and the references.

STANDARD(S): Ensuring the illumination Call For Fire (CFF) is transmitted within 2 minutes and the target is adequately illuminated.

PERFORMANCE STEPS:

- 1. Locate the target.
- 2. Transmit the complete illumination call for fire, in proper sequence.
- 3. Determine and transmit subsequent corrections.
- 4. Complete the mission.
- 5. Transmit appropriate refinement, End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2	4.000 EA	4.000 EA	24.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	4.000 EA	4.000 EA	24.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
N285	FUZE M577 MT	4.000 EA	4.000 EA	24.000 EA
	May use N248 MT M565.			
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.21 (CORE) CONDUCT A COORDINATED ILLUMINATION MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references, suspected enemy ACTIVITY is detected during the hours of darkness.

STANDARD(S): Illumination call for fire is transmitted within 60 seconds (120 seconds with ODT) of detecting suspected enemy ACTIVITY; illumination is adjusted to illuminate the suspected target; the suspected target is positively identified as enemy; HE call for fire is transmitted within 60 seconds (120 seconds with ODT) of identifying the target as enemy; initial HE round is within 200 meters of the actual target; and, the HE FFE is within +/-50 meters of the actual target.

PERFORMANCE STEPS:

- 1. Transmit the complete illumination Call For Fire (CFF), in proper sequence.
- 2. Determine and transmit subsequent corrections to include HOB, if required.
- 3. Once target is illuminated, determine target location.
- 4. Transmit coordinated illumination Call For Fire (CFF), in proper sequence.
- 5. Transmit "MARK" when the illumination round best illuminates the target.
- 6. Determine and transmit subsequent corrections within 15 seconds of High Explosive (HE) round impact.
- 7. Fire For Effect (FFE).
- 8. Transmit refinement data (if any), Record as Target (if desired), End of Mission (required), and surveillance (required).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2	7.000 EA	7.000 EA	42.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	12.000 EA	12.000 EA	72.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			

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D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N285	FUZE M577 MT	7.000 EA	7.000 EA	42.000 EA
	May use N248 MT M565.			
N340	FUZE, PD, M739	5.000 EA	5.000 EA	30.000 EA
	May use N335 M557 PD SQ/D.			
N523	PRIMER, PERCUSSION, M82	12.000 EA	12.000 EA	72.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS: NVGs and/or NVSS will not be used.

TASK: 0861.03.22 (CORE PLUS) CONDUCT A FASCAM MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) team and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Obtain permission from the commander to fire FASCAM.
2. Transmit the Call For Fire (CFF) to initiate a FASCAM minefield.
3. Conduct the mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-20-5, Field Artillery Delivered Scatterable Mines
2. FM 6-30, Observed Fire Procedures
3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D501	155MM M692 ADAM-L	12.000 EA	12.000 EA	72.000 EA
	May use D502 155mm M731 ADAM-S.			
D503	155MM M718 RAAM-L	12.000 EA	12.000 EA	72.000 EA
	May use D509 155mm M741 RAAMS-S.			
D540	CHG PROP 155MM, GREEN BAG, M3	27.000 EA	27.000 EA	162.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
N285	FUZE M577 MT	24.000 EA	24.000 EA	144.000 EA
N340	FUZE, PD, M739	3.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	27.000 EA	27.000 EA	162.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.23 (CORE PLUS) CONDUCT A DPICM MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Transmit the Call For Fire (CFF) to initiate an DPICM mission.

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- 2. Conduct the mission.
- 3. Make appropriate corrections.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 may use D541 155mm M4 series, white bag, with zones 3 through 7.	7.000 EA	7.000 EA	42.000 EA
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
D563	PROJ 155MM, HE DP ICM, M483A1	4.000 EA	4.000 EA	24.000 EA
N285	FUZE M577 MT	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	3.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	7.000 EA	7.000 EA	42.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.24 (CORE) CONDUCT A DANGER CLOSE FIRE MISSION

CONDITION(S): Given organic FO Team equipment and the references.

STANDARD(S): Per the references, using creeping fire procedures properly.

PERFORMANCE STEPS:

- 1. Determine the target location.
- 2. Prepare and submit the Call For Fire (CFF).
- 3. Determine and transmit subsequent corrections within 15 seconds of burst.
- 4. Adjust fires using creeping fire techniques.
- 5. Request Fire For Effect (FFE).
- 6. Transmit refinement data (if any), Record as Target, End of Mission (required), and surveillance (required).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

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DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.26 (CORE PLUS) CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Transmitting both Calls For Fire (CFF) within 2 minutes of identification of the last target. Initial target locations must be within 200 meters of the actual location of the target. Fire For Effect (FFE) must be within 50 meters of each target, with no more than three subsequent rounds used in adjustment.

PERFORMANCE STEPS:

- 1. Determine location of targets.
- 2. Prepare and transmit both Calls For Fire (CFFs), in the proper sequence.
- 3. Precede corrections with, "TARGET NUMBER".
- 4. Complete missions using normal procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	10.000 EA	60.000 EA
D544	PROJ 155MM, HE, M107	0.000 EA	10.000 EA	60.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	0.000 EA	10.000 EA	60.000 EA
N523	PRIMER, PERCUSSION, M82	0.000 EA	10.000 EA	60.000 EA

TASK: 0861.03.27 (CORE PLUS) ADJUST FINAL PROTECTIVE FIRES

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Per the references, adjusting the Final Protective Fires (FPF) to the exact location specified by the company commander.

PERFORMANCE STEPS:

- 1. Select an adjusting point based on the maneuver commander’s guidance.
- 2. Transmit the complete call for fire in the proper sequence announcing, "DANGER CLOSE."
- 3. Determine and transmit subsequent corrections for each piece to the nearest 10 meters.
- 4. Adjust fires using creeping fire techniques.
- 5. Continue adjustment until round bursts within 50 meters of the desired location.
- 6. Transmit refinement data and instruct the Fire Direction Center (FDC) to begin firing the next piece.

- 7. When last piece is adjusted; FPF is adjusted.
- 8. End Of Mission (EOM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

		INITIAL	PER	ANNUAL
DODIC NOMENCLATURE		PROFICIENCY	ITERATION	SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3	32.000 EA	32.000 EA	192.000 EA
May use D541 155mm M4 series, white bag, with zones 3 through 7.				
D544	PROJ 155MM, HE, M107	32.000 EA	32.000 EA	192.000 EA
N340	FUZE, PD, M739	32.000 EA	32.000 EA	192.000 EA
May use N335 M557 PD SQ/D.				
N523	PRIMER, PERCUSSION, M82	32.000 EA	32.000 EA	192.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS:

- 1. If the FDC is BCS or BUCS equipped, only the center weapon is adjusted onto the center grid of the FPF and the adjustment is then terminated.
- 2. Manual gunnery requires that all guns be adjusted into the FPF.
- 3. A MULE equipped observer may lase specific aimpoints for each gun in the firing element. Each gun will then be aimed at that point. This TTP can be used to cover smaller areas of deadspace where a linear sheaf would not be appropriate.

TASK: 0861.03.28 (CORE) CONDUCT AN IMMEDIATE SMOKE MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Totally obscuring the target using WP or M825, and ensuring the initial target location is within 300 meters of the actual target location and the Call For Fire (CFF) is transmitted within 30 seconds of target location.

PERFORMANCE STEPS:

- 1. Determine the placement point of immediate smoke.
- 2. Transmit the complete Call For Fire (CFF) in the proper sequence.
- 3. Determine and transmit subsequent corrections, as required.
- 4. Spot initial rounds and determine and transmit deviation and range corrections to provide effective coverage. Minimum deviation and range corrections are 50 and 100 meters, respectively.
- 5. Determine height-of-burst corrections, as necessary.
- 6. End mission when desired results are achieved.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures

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2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D528	PROJ 155MM, SMOKE, WP, M825	4.000 EA	4.000 EA	24.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3 may use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D550	PROJ 155MM, SMOKE, WP, M110A1	1.000 EA	1.000 EA	6.000 EA
N285	FUZE M577 MT	4.000 EA	4.000 EA	24.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	1.000 EA	1.000 EA	6.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

DISTANCE LEARNING PRODUCT(S):

1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS: Firing standards will be directed by unit SOP.

TASK: 0861.03.29 (CORE) CONDUCT A QUICK SMOKE MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Successfully denying enemy observation using WP or M825 and ensuring initial target location is within 200 meters of the actual target location. The Call For Fire (CFF) must be transmitted within 90 seconds of target identification, and subsequent corrections made within 15 seconds of the previous burst.

PERFORMANCE STEPS:

- Determine the size of the area to be obscured or screened.
- Determine the wind direction in relation to the maneuver-target line.
- Determine the desired obscuration effect (visual or infrared/IR).
- Determine the adjusting point.
- Prepare and transmit Call For Fire (CFF).
 - Announce observer identification.
 - Announce adjust fire.
 - Announce High Explosive (HE) adjusting point location.
 - Transmit the target length.
 - Transmit the maneuver-target direction.
 - Transmit wind direction.
 - Left cross.
 - Right cross.
 - Head wind.
 - Tail wind.
 - Transmit the duration time that the smoke is required.
 - Announce effects desired ("IR" must be announced for infrared effects; when omitted visual effects are requested by default).
 - Complete the Call For Fire (CFF).

- 6. If target is located by grid coordinate, transmit the OT direction before or with the first correction.
- 7. Transmit High Explosive (HE) corrections.
- 8. Switch to smoke when a 200-meter bracket is split.
- 9. Request fire for effect with smoke following adjustment of initial smoke round, if desired effects achieved.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

		INITIAL	PER	ANNUAL
DODIC NOMENCLATURE		PROFICIENCY	ITERATION	SUSTAINMENT
D528	PROJ 155MM, SMOKE, WP, M825	6.000 EA	6.000 EA	36.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	15.000 EA	15.000 EA	90.000 EA
May use D541 155mm M4 series, white bag, with zones 3 through 7.				
D544	PROJ 155MM, HE, M107	3.000 EA	3.000 EA	18.000 EA
D550	PROJ 155MM, SMOKE, WP, M110A1	6.000 EA	6.000 EA	36.000 EA
N285	FUZE M577 MT	6.000 EA	6.000 EA	36.000 EA
N340	FUZE, PD, M739	9.000 EA	9.000 EA	54.000 EA
May use N335 M557 PD SQ/D.				
N523	PRIMER, PERCUSSION, M82	15.000 EA	15.000 EA	90.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

ADMINISTRATIVE INSTRUCTIONS:

- 1. If the M825 round is used, no HOB adjustment should be necessary.
- 2. Standard should be observed under ideal weather conditions.

TASK: 0861.03.30 (CORE PLUS) CONDUCT A DESTRUCTION MISSION

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Successfully destroying the target.

PERFORMANCE STEPS:

- 1. Locate target.
- 2. Transmit call for fire ensuring "Destruction" is used as type of adjustment.
- 3. Adjust rounds to the target utilizing precision registration procedures.
- 4. Continue to fire rounds at the target.
- 5. Make corrections, as necessary (normally after every third round).
- 6. Fire until the target is destroyed.
- 7. Transmit End Of Mission (EOM) and surveillance.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	10.000 EA	10.000 EA	60.000 EA
D544	PROJ 155MM, HE, M107	10.000 EA	10.000 EA	60.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	10.000 EA	10.000 EA	60.000 EA
N523	PRIMER, PERCUSSION, M82	10.000 EA	10.000 EA	60.000 EA

ADMINISTRATIVE INSTRUCTIONS: Destruction puts a target out of action permanently. Exact percentages to define "destruction" vary and are determined by the commander based on the situation.

TASK: 0861.03.31 (CORE) CONDUCT A MISSION ON A MOVING TARGET

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team and the references.

STANDARD(S): Per the references, successfully engaging a moving target using the special techniques required for the situation.

PERFORMANCE STEPS:

- 1. Identify a moving target.
- 2. Select an Intercept Point (IP) along the target’s likely route of march as the target location.
- 3. Prepare and transmit a Call For Fire (CFF).
 - a. State the target is moving in your target description portion of the call for fire.
 - b. State AMC in the "Method of Fire" portion of the call for fire.
- 4. Determine when to fire based on rate of speed of the target and time of flight (determine a trigger point).
- 5. Conduct the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May us N335 M557 PD SQ/D.	5.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

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ADMINISTRATIVE INSTRUCTIONS: Adjust rounds to IP if possible. This will improve first round accuracy and increase the damage to the target.

TASK: 0861.03.32 (CORE) SELECT AND LOCATE REGISTRATION POINTS

CONDITION(S): Given a compass, binoculars, a coordinate scale, an observed fire (OF) fan, a map of the target area, and a zone of observation.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Select a registration point close to the center of the zone of action.
2. Determine and record the grid of the registration points.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

ADMINISTRATIVE INSTRUCTIONS: Locate a suitable registration point, close to the center of the target area or zone of action, by an eight-digit grid within 30 meters of the actual location, and to the nearest 10 mils and within 50 mils of the actual direction to the target.

TASK: 0861.03.33 (CORE) CONDUCT A PRECISION REGISTRATION, QUICK AND TIME

CONDITION(S): Given equipment organic to a Forward Observer (FO) Team, the references, and an MTO from the FDO initiating the precision registration.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the OT factor.
2. Draw a diagram of the impact of all rounds, recording the spottings to the nearest mil.
3. Split the 100-meter bracket by requesting, "ADD (DROP) 50."
4. Spot the next round. Split the 50-meter bracket by requesting, "2 ROUNDS, ADD (DROP) 25", as appropriate, to obtain an opposite spotting.
5. Request, "1 ROUND, ADD (DROP) 25", as appropriate, if these rounds are spotted opposite that of the previous spotting, to make the next round impact opposite the last 2 rounds.
6. Determine and announce the range and deviation refinement data to the nearest 10 meters.
7. Announce, "RECORD AS REGISTRATION POINT, TIME REPEAT, OVER."
8. Request, "3 ROUNDS, REPEAT", once a measurable airburst is obtained.
9. Record the spotting of each round.
10. Determine the appropriate mean HOB correction of the 4 rounds to achieve a 20-meter HOB.
11. Transmit HOB refinement--"HOB CORRECTION, RECORD AS TIME REGISTRATION POINT, END OF MISSION."

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D54 155mm M4 series, white bag, with zones 3 through 7.	13.000 EA	13.000 EA	78.000 EA
D544	PROJ 155MM, HE, M107	13.000 EA	13.000 EA	78.000 EA
N286	FUZE M582 MTSQ May use N278 MTSQ M564.	6.000 EA	6.000 EA	36.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD SQ/D.	7.000 EA	7.000 EA	42.000 EA
N523	PRIMER, PERCUSSION, M82	13.000 EA	13.000 EA	78.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.34 (CORE) CONDUCT A HIGH-BURST OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, an aiming circle or battery commander’s scope, a surveyed OP, directional control, and orienting data.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Correctly set up instruments.
- 2. Orient the instruments before the first round is fired, per the Fire Direction Center’s (FDC) instructions.
- 3. Report to the Fire Direction Center (FDC) when ready to observe.
- 4. Measure and report the spotting of the impacts and/or bursts.
- 5. Reorient the instrument to the location of the first round only.
- 6. Continue observing until the Fire Direction Center (FDC) ends the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	8.000 EA	8.000 EA	48.000 EA
D544	PROJ 155MM, HE, M107	8.000 EA	8.000 EA	48.000 EA
N290	FUZE, ELECTRONIC TIME Used only for high-burst	8.000 EA	8.000 EA	48.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD or N278 MTSQ M564 or N286 MTSQ M582.	8.000 EA	8.000 EA	48.000 EA
N523	PRIMER, PERCUSSION, M82	8.000 EA	8.000 EA	48.000 EA

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DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.35 (CORE) CONDUCT AN ABBREVIATED REGISTRATION

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, a designated registration point, a zone of observation, and an MTO from the FDO initiating the abbreviated registration.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Initiate Abbreviated registration
- 2. Determine and transmit subsequent corrections.
- 3. Record registration point and time registration point correctly.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	5.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	5.000 EA	5.000 EA	30.000 EA
N286	FUZE M582 MTSQ May use N278 MTSQ M564.	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD.	3.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	5.000 EA	5.000 EA	30.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures

TASK: 0861.03.36 (CORE PLUS) CONDUCT A MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)

CONDITION(S): Given the references, an AN/PAQ-3 Modular Universal Laser Equipment (MULE), communications with the Fire Direction Center (FDC), a designated registration point, an AN/PSC-2 Digital Communications Terminal (if so equipped), a map, and a MessageToObserver (MTO) fromtheFireDirectionOfficer (FDO) initiatingaregistration.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Set up the MULE for operation.
- 2. Lase the bursts of the rounds.
- 3. Transmit the direction, distance, and VA of the bursts to the Fire Direction Center (FDC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	0.000 EA	5.000 EA	30.000 EA
N286	FUZE M582 MTSQ May use N278 MTSQ M564.	0.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD.	0.000 EA	3.000 EA	18.000 EA
N523	PRIMER, PERCUSSION, M82	0.000 EA	5.000 EA	30.000 EA

TASK: 0861.03.37 (CORE PLUS) CONDUCT EMERGENCY OBSERVER PROCEDURES

CONDITION(S): Given an emergency situation in which the only firing battery that can support you has no FDC available and there are no other fire support means available to engage the target that must be engaged, a target, communications with the battery, a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Estimate the range from the battery to the target.
- 2. Determine the charge by use of the following rules:
 - a. 105mm: Charge equals range in thousands plus 1.
 - b. 155mm: Charge equals range in thousands.
- 3. Determine deflection to the target by converting the azimuth to the target into deflection. You must know the battery azimuth of lay.
- 4. Fire quadrant 240 mils.
- 5. Transmit the fire commands to the battery.
- 6. Make subsequent corrections with respect to the GT line as follows:
 - a. Determine 100/R. 100/R equals 100 divided by the range in thousands to the nearest hundred.
 - b. Determine correction in deflection. Correction in deflection, in mils, equals the change in meters, divided by 100, times 100/R. (Change in meters divided by 100 x 100/R.)
 - c. Determine the number of mils change to quadrant that will give a 100-meter range change (C-factor). A change in QE is expressed in mils. Range change is expressed in hundreds of meters times the C-factor.
 - d. Determine the fuze setting by estimating the time of flight.
 - e. Adjust the height of burst using C-factor of 2 divided by initial fuze setting for the change in HOB.
- 7. Enter fire for effect.
- 8. Transmit refinement data, END OF MISSION, and observed effects.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7	4.000 EA	4.000 EA	24.000 EA
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
N290	FUZE, ELECTRONIC TIME May use N278, M564 MTSQ or N286, M582 MTSQ	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739 May use N335, M557 PD SQ/D	2.000 EA	2.000 EA	12.000 EA
N523	PRIMER, PERCUSSION, M82	4.000 EA	4.000 EA	24.000 EA

TASK: 0861.03.38 (CORE PLUS) CONDUCT A MORTAR PRECISION REGISTRATION

CONDITION(S): Given a compass, binoculars, a map of the target area, communications with the FDC, a designated registration point, an AN/GVS-5 Laser Range Finder (if so equipped), an Observer Digital Terminal (ODT) (if so equipped). Mortar FO’s are not located with your unit.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Transmit the call for fire.
- 2. Determine and transmit subsequent corrections.
- 3. Adjust the sheaf, if necessary.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
B642	CTG 60MM, HE, W/MOF M734	11.000 EA	11.000 EA	66.000 EA
C256	81MM HE, M374 SERIES W/FZ PD	11.000 EA	11.000 EA	66.000 EA

TASK: 0861.03.40 (CORE PLUS) CONDUCT FIRE MISSION ON IRREGULARLY SHAPED TARGETS

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, and an irregularly shaped target.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Prepare and transmit complete Call For Fire (CFF), in proper sequence, within 120 seconds of target identification.
- 2. Locate the target center within +/- 200 meters of actual location.

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- 3. Transmit two grids or a center grid with length and attitude to describe linear targets.
- 4. Transmit attitude to the nearest 100 mils and within 200 mils of the actual attitude. (Attitude is always less than 3200 mils.)
- 5. Transmit circular target location as a center grid and a radius.
- 6. Transmit three or more grids to locate a target when needed. For example, use three or more grids to accurately portray a uniquely shaped target that is "L" shaped.
- 7. Determine and transmit subsequent corrections.
- 8. Adjust on target center using hasty or successive bracketing.
- 9. Send all subsequent corrections within 15 seconds of HE burst.
- 10. Transmit refinement data (if any), Record as Target (if desired), End Of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D540	CHG PROP 155MM, GREEN BAG, M3 May use D541 155mm M4 series, white bag, with zones 3 through 7.	0.000 EA	5.000 EA	30.000 EA
D544	PROJ 155MM, HE, M107	0.000 EA	5.000 EA	30.000 EA
N340	FUZE, PD, M739 May use N335 M557 PD.	0.000 EA	5.000 EA	30.000 EA
N523	PRIMER, PERCUSSION, M82	0.000 EA	5.000 EA	30.000 EA

TASK: 0861.03.41 (CORE PLUS) CONDUCT A COPPERHEAD MISSION

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, and a laser pulse repetition frequency code.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine and report operator cloud height.
- 2. Identify the target.
- 3. Select the proper number of rounds based on the number of targets.
- 4. Transmit the copperhead Call For Fire (CFF).
- 5. Designate the target for 13 seconds when given the command, "LASER ON" by the Fire Direction Center (FDC).
- 6. Terminate the mission.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures

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ENCLOSURE (3)

2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D510	PROJ 155MM, COPPERHEAD, M712	2.000 EA	2.000 EA	12.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	2.000 EA	2.000 EA	12.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
N523	PRIMER, PERCUSSION, M82	2.000 EA	2.000 EA	12.000 EA

TASK: 0861.03.42 (CORE PLUS) DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE

CONDITION(S): Given a scenario involving a close air support strike with no Forward Air Controller (FAC), the references, equipment organic to a Forward Observer (FO) Team, an attack aircraft with ordnance, and an information sheet containing: an aircraft call sign, mission number, type ordnance load, enemy situation, friendly situation, attack restrictions, and a radio frequency.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Consider the air threat situation.
2. Obtain the commander’s approval before sending the Close Air Support (CAS) request.
3. Send immediate requests to the Fire Support Coordination Center (FSCC).
4. Transmit immediate Close Air Support (CAS) requests within 2 minutes of target identification.
5. Plan for and implement Suppression of Enemy Air Defenses (SEAD) as required based on the assessment of the air threat. (See task 0802.01.35, CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION.)
6. Transmit the 9 line brief to the pilot when the aircraft reaches the CP.
7. Transmit the Time To Target (TTT) to the pilot after the 9 line brief.
8. Mark the target using artillery, mortars, or Naval Gunfire (NGF). The mark should be within 300 meters of the target and 30 seconds before Time To Target (TTT).
9. Give the pilot final adjustment, in meters, from the marking round (reference point, to the target).
10. Ensure attack aircraft is lined up on proper target before, "CLEARING HOT."
11. Adjust from previous aircraft hits to target giving reference to cardinal headings for follow-on aircraft.
12. Transmit effects of the strike to the aircraft and Fire Support Coordination Center (FSCC), as appropriate.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FM 6-30, Observed Fire Procedures
4. FMFM 5-4, Offensive Air Support

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- 5. FMFM 5-4A, Close Air Support and Close-In Fire Support
- 6. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
- 7. STANAG 3797, Minimum Qualifications for Forward Air Controller

DISTANCE LEARNING PRODUCT(S):

- 1. 2532, HF/UHF Field Radio Equipment

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

ADMINISTRATIVE INSTRUCTIONS: This task must be conducted concurrently with Task 0861.03.43.

TASK: 0861.03.43 (CORE) CONDUCT AN ARTILLERY SUPPRESSION OF ENEMY AIR DEFENSE (SEAD)

CONDITION(S): Given the references, equipment organic to a Forward Observer (FO) Team, the need to suppress enemy air defenses in the vicinity of the target area, ingress and egress routes, and access to the Forward Air Controller (FAC).

STANDARD(S): Per the references, successfully coordinating with friendly air, and transmitting the Call For Fire (CFF) in the correct sequence.

PERFORMANCE STEPS:

- 1. Identify Suppression of Enemy Air Defense (SEAD) targets and location to mark.
- 2. Transmit the Call For Fire (CFF).
- 3. Direct the target to be marked.
- 4. Ensure the marking round impacts 30 seconds before the aircraft's bombs impact on the target.
- 5. Ensure the marking round is within 300 meters of the target.
- 6. Complete the mission.
- 7. Record the Suppression of Enemy Air Defense (SEAD) target, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D505	PROJ 155MM, ILLUM, M485A2	2.000 EA	2.000 EA	12.000 EA
D540	CHG PROP 155MM, GREEN BAG, M3	8.000 EA	8.000 EA	48.000 EA
	May use D541 155mm M4 series, white bag, with zones 3 through 7.			
D544	PROJ 155MM, HE, M107	4.000 EA	4.000 EA	24.000 EA
D550	PROJ 155MM, SMOKE, WP, M110A1	2.000 EA	2.000 EA	12.000 EA
N340	FUZE, PD, M739	6.000 EA	6.000 EA	36.000 EA
	May use N335 M557 PD.			
N523	PRIMER, PERCUSSION, M82	8.000 EA	8.000 EA	48.000 EA

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0861.03.44 (CORE) CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION

CONDITION(S): Given a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an Observed Fire (OF) fan, a target, pencil, paper, and the references.

STANDARD(S): Per the references, conducting either a grid, shift from a known point, polar, or laser polar plot mission. The target must be identified within 200 meters of its actual location; altitude to within 10 meters of the actual altitude or VA; initial Call For Fire (CFF) transmitted within 60 seconds of target identification; subsequent corrections transmitted within 10 seconds of round impact; and Fire For Effect (FFE) for 5-inch guns initiated when a 100-meter bracket is split for a point target and a 200-meter bracket is split for an area target.

PERFORMANCE STEPS:

- 1. Determine target location.
- 2. Prepare and transmit the Call For Fire (CFF) to the ship in two transmissions using correct Naval Surface Fire Support (NSFS) procedures and terminology.
- 3. Make subsequent corrections.
- 4. Initiate Fire For Effect (FFE).
- 5. Transmit End Of Mission (EOM) and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
- 2. FM 6-30, Observed Fire Procedures
- 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D339 5-INCH/54 HE FUZE PD	5.000 EA	5.000 EA	30.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures
- 2. 2532, HF/UHF Field Radio Equipment

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0861.03.45 (CORE) CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) MISSION

CONDITION(S): Given the need to suppress enemy air defenses in the vicinity of the target area and on ingress and egress routes, the enemy air defense threat condition, commander's guidance, a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder (if so equipped), a coordinate scale, a target, communications with a fire support ship and the NGF liaison officer, a fire support ship with the MK-86 GFCS and two operational gun mounts (if mission is both a mark and suppress), access to the forward air controller (FAC), a pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine whether continuous SEAD or interrupted SEAD will be used.

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- 2. Identify SEAD targets and target to mark.
- 3. Transmit CFF.
- 4. Process the mission.
- 5. Ensure the marking round impacts 30 seconds before the aircraft's bombs impact in the target.
- 6. Ensure the marking round is within 300 meters of the target.
- 7. Complete the mission.
- 8. Record SEAD target, as required.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
- 2. CONSURFWARDEVGRU TACMEMO PD 3410-1-97, Suppression of Enemy Air Defenses (SEAD)-Fire Mission using Naval Gunfire Support
- 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D295	5-INCH/54 HE FUZE CVT May use D338, 5"/54 HE MT	8.000 EA	8.000 EA	48.000 EA
D313	5-INCH/54 WP FUZE PD May use D353, 5"/54 ILLUM or D354, 5"/54 ILLUM	1.000 EA	1.000 EA	6.000 EA

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0861.03.46 (CORE) CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder (if so equipped), a coordinate scale, a target that needs to be engaged with high angle fire, communications with a direct support fire support ship, a pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Recognize targets that require high angle fire, e.g., those in defilade.
- 2. Transmit the call for fire (CFF) requesting "High Angle" in the method of engagement.
- 3. Conduct the mission.
- 4. Transmit EOM and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
- 2. FM 6-30, Observed Fire Procedures
- 3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

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AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D339 5-INCH/54 HE FUZE PD	5.000 EA	5.000 EA	30.000 EA

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller
-

TASK: 0861.03.47 (CORE) CONDUCT A DANGER CLOSE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a compass, binoculars, a map, a coordinate scale, communications with a fire support ship, an observed fire (OF) fan, a pencil and paper, and a target within danger close distance of troops.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Recognize when a "DANGER CLOSE" situation exists.
2. Transmit the call for fire (CFF).
3. Conduct the mission.
4. Transmit EOM and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
2. FM 6-30, Observed Fire Procedures
3. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D339 5-INCH/54 HE FUZE PD	5.000 EA	5.000 EA	30.000 EA

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller
-

TASK: 0861.03.48 (CORE) REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a tactical scenario that requires fire on a recorded target, a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a target, pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Identify the target and corresponding target number.
2. Transmit the abbreviated CFF.
 - a. Announce "FIRE MISSION, REFIRE TARGET NUMBER SO-AND-SO, DIRECTION SO-AND-SO" or DIRECTION SO-AND-SO", and any desired subelements of the target description if it has change, and method of control and engagement if other than standard.
 - b. Send entire transmission as one, there is no break in transmission.
3. Complete the mission.

4. Transmit EOM and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D295 5-INCH/54 HE FUZE CVT	4.000 EA	4.000 EA	24.000 EA
May use D339, 5"/54 HE PD or D338, 5"/54 HE MT or D313, 5"/54 WP PD or D314, 5"/54 WP MT			

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

ADMINISTRATIVE INSTRUCTIONS: The task can be evaluated using the terrain board simulator.

TASK: 0861.03.49 (CORE) CONDUCT AN ILLUMINATION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a target during darkness, a general direction to the target, a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine suspected location of the target.
- 2. Transmit the CFF within 60 seconds of identifying a suspected target specifying either "CONTINUOUS ILLUMINATION" or "COORDINATED ILLUMINATION" in the method of engagement.
- 3. Make illumination corrections.
- 4. Announce "RIPPED CHUTE" or "DARK STAR" if applicable.
- 5. Complete the mission.
- 6. Transmit EOM and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
- 2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D353 5-INCH/54 ILLUM	7.000 EA	7.000 EA	42.000 EA
May use D354, 5"/54 ILLUM			

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0861.03.50 (CORE) CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a tactical scenario where a target of higher priority presents itself during the conduct of a fire mission on another target, a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Detect when a fresh target shift mission should take place by recognizing that a higher priority target has presented itself.
2. Begin the new abbreviated call for fire (CFF) within 45 seconds, without ending the current mission, by announcing "FRESH TARGET".
3. Complete the mission.
4. Transmit EOM and surveillance on both targets.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D339 5-INCH/54 HE FUZE PD	5.000 EA	5.000 EA	30.000 EA

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller

TASK: 0861.03.51 (CORE) CONDUCT SIMULTANEOUS MISSIONS WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given two targets that require fire at the same time, a compass, binoculars, a map, a fire support ship with the MK-86 GFCS aboard and two operational gun mounts, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Transmit the call for fire (CFF) on the first target within 2 minutes.
2. Transmit the second CFF when the mission is ready.
3. Preface all subsequent transmissions with the last two digits of the target number to which the transmission applies.
4. Complete both missions.
5. Transmit EOM and surveillance on both targets as each mission ends.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

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AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D339 5-INCH/54 HE FUZE PD	10.000 EA	10.000 EA	60.000 EA

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller

TASK: 0861.03.52 (CORE) CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a situation where a Marine is conducting a fire mission and a new target is identified that requires simultaneous fire, a compass, binoculars, a map, a fire support ship with the MK-86 GFCS aboard and two operational gun mounts, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Transmit the call for fire (CFF) on the first target.
2. Initiate the CFF on the second target using fresh target shift procedures within 45 seconds of identify the target.
3. Substitute the words "NEW TARGET" for "FRESH TARGET".
4. Follow simultaneous target mission procedures.
5. Complete both missions.
6. Transmit EOM and surveillance on both targets as each mission ends.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. ATP 4E W/CH 2, Allied Spotting Procedures for Naval Gunfire Support
2. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D339 5-INCH/54 HE FUZE PD	10.000 EA	10.000 EA	60.000 EA

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller

TASK: 0861.03.53 (CORE) CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION

CONDITION(S): Given a tactical situation during darkness with suspected enemy noises.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Transmit the complete illumination call for fire, in proper sequence.
2. Determine and transmit illumination corrections to include HOB, if required.
3. Once the target is illuminated, determine location of the target.
4. Transmit the coordinated illumination call for fire, in proper sequence.
5. Transmit "MARK" when the illumination round best lights the target.

- 6. Determine and transmit subsequent corrections within 15 seconds of HE round impact.
- 7. FFE.
- 8. Transmit appropriate refinement, EOM, and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

AMMUNITION:

DODIC NOMENCLATURE		INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
D326	5-INCH/54 HE FUZE QUICK May use D295, 5"/54, HE CVT or D338, 5"/54, HE MT.	5.000 EA	5.000 EA	30.000 EA
D353	5-INCH/54 ILLUM	7.000 EA	7.000 EA	42.000 EA

DISTANCE LEARNING PRODUCT(S):

- 1. 0861, Basic Forward Observation Procedures
- 2. 2515, Antenna Construction and Propagation of Radio Waves
- 3. 2532, HF/UHF Field Radio Equipment

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

DUTY AREA 04 - FIRE SUPPORT PLANNING AND COORDINATION

TASK: 0861.04.01 (CORE PLUS) MAINTAIN INFORMATION ON FIRE SUPPORT STATUS CHART

CONDITION(S): Given a fire support status chart, plotting equipment, an operation order with a fire support appendix (Appendix 12), and a Communications-Electronic Operating Instruction Publication (CEOI).

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Post the following pertinent information required by the Commanding Officer/Fire Support Coordinator (CO/FSC), as necessary:
 - a. Designations, locations, missions, call signs, and radio frequency of all support assets responsive to the maneuver unit.
 - b. Ammunition availability in relation to the announced controlled supply rate.
 - c. Final protective fires allocated through maneuver channels.
 - d. Special weapons allocations.
 - e. Target engaged over a period of time.
 - f. Change in counterfire status.
 - g. Restrictions on engagement of certain types of targets.
- 2. Update all information, as required.
- 3. Monitor changes in the tactical situation and modify the fire support status chart to display pertinent information, as necessary.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols
- 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: Information displayed/required on a fire support status chart will vary depending on the desires of the CO/FSC, the organization and its assets, and the tactical situation.

TASK: 0861.04.02 (CORE PLUS) POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)

CONDITION(S): Given a mounted map covered with acetate, plotting equipment, a list of current tactical information, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Plot boundary, coordinating points, maneuver control points, and other maneuver control measures.
- 2. Plot locations of all friendly units, including target acquisition assets.
- 3. Plot all coordination measures.
- 4. Plot all targets.
- 5. Plot enemy units.
- 6. Plot locations of subordinate units of a supported maneuver unit.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. FM 101-5-1, Operational Terms and Symbols
- 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0861.04.03 (CORE PLUS) PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)

CONDITION(S): Given a situation map; overlay material; plotting equipment; the location and type of all supporting fires, to include mortars, field artillery, and Naval Surface Fire Support (NSFS); and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Attach a sheet of overlay paper on the situation map.
- 2. Write the marginal information on the overlay.
- 3. Plot and label the orienting grid register marks on the overlay.
- 4. Plot and label the location of all field artillery units.
- 5. Plot and label the range capability of all indirect fire weapons that can provide fire support in the maneuver zone.
- 6. Plot and label all Fire Support Coordination Measures (FSCM).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. FM 101-5-1, Operational Terms and Symbols
 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0861.04.04 (CORE PLUS) PREPARE/SUBMIT A LIST OF TARGETS

CONDITION(S): Given targets, complete target information, maps, target list worksheets, pencil, commander's or platoon leader's guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Identify and recommend target to the commander.
2. Assign authorized target numbers only.
3. Transfer the target information to the target list worksheet, properly completing all the information.
4. Annotate approval of the list of targets.
5. Submit the list of targets to the Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0861.04.05 (CORE PLUS) CONSOLIDATE/PROCESS FORWARD OBSERVER'S (FO) LISTS OF TARGETS

CONDITION(S): Given a Fire Support Coordination Center (FSCC) with all equipment, commander's guidance, forward observer's lists of targets, blank target list worksheets, a pencil, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Collect and record Forward Observer's (FO) lists of targets and the commander's guidance.
2. Display the targets on an overlay.
3. Identify conflicts and duplications.
4. Identify targets that violate commander's guidance and Fire Support Coordination Measures (FSCM).
5. Consolidate all lists of targets into a target list.
6. Ensure planned targets are consistent with the commander's guidance.
7. Submit the target list to the commander for approval.
8. Disseminate the target list to the appropriate units and agencies.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

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REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 4. MCWP 3-16A, Targeting Process

TASK: 0861.04.06 (CORE PLUS) PREPARE A TARGET BULLETIN (TARBUL)

CONDITION(S): Given a target list, target cancellations, a list of targets destroyed, target additions, targets damaged, reactivated targets, corrections to existing target, a Fire Support Coordination Center (FSCC) with all equipment, a blank TARBUL format, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Designate the first TARBUL as "Target Bulletin One".
- 2. Designate the last TARBUL as "Final Target Bulletin".
- 3. Annotate all additions, deletions, cancellations, changes, and updates.
- 4. Disseminate the TARBULs, accordingly.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. MCWP 3-16, Fire Support Coordination
- 2. MCWP 3-16A, Targeting Process

TASK: 0861.04.07 (CORE PLUS) ADVISE THE SUPPORTED UNIT OF FRIENDLY AND ENEMY FIRE SUPPORT CAPABILITIES AND LIMITATIONS

CONDITION(S): Given an operations order, the current intelligence summary, an updated situation map, the fire support status chart, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. State the general capabilities and limitations of mortars, field artillery, naval surface support, and close air support.
- 2. Determine the friendly fire support asset available to the supported unit.
- 3. Determine the enemy fire support asset threatening the supported unit.
- 4. State the specific characteristics of at least two available friendly weapon systems.
- 5. State the specific characteristics of at least two common enemy weapon systems threatening the supported unit.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 100-2-3, The Soviet Army
- 2. FM 6-20, Fire Support in Airland Battle
- 3. FM 6-20-40, Fire Support For Brigade Operations (Heavy)

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4. FM 6-20-50, Fire Support For Brigade Operations (Light)
5. FM 6-30, Observed Fire Procedures
6. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
7. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
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TASK: 0861.04.08 (CORE PLUS) PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST

CONDITION(S): Given a Joint Tactical Air Strike Request (JTAR) for a preplanned mission 72 hours in advance, a fully operational Fire Support Coordination Center (FSCC), commander's guidance, a higher echelon FSCC, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Review the Joint Tactical Air Strike Request (JTAR) for accuracy and completeness.
2. Make liaison with the Air Officer, if possible.
3. Gain the Fire Support Coordinator's (FSC) approval prior to processing the Joint Tactical Air Strike Request (JTAR).
4. Forward the Joint Tactical Air Strike Request (JTAR) to the higher Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FMFM 5-4, Offensive Air Support
2. FMFM 5-4A, Close Air Support and Close-In Fire Support
3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller
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TASK: 0861.04.09 (CORE PLUS) DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN

CONDITION(S): Given a tactical situation wherein time limits preclude formal fire planning, communications with the Fire Direction Center (FDC) and Fire Support Coordination Center (FSCC), the commander's guidance, DA Form 5368-R (Quick Fire Plan), priority of fires, a minimum of five targets, knowledge of available fire support assets, order and timing of target engagement, duration of fires, H-hour, a pencil, and the references.

STANDARD(S): Per the references, and within 20 minutes of the requirement.

PERFORMANCE STEPS:

1. Obtain the commander's guidance.
2. Complete DA Form 5368-R heading.
3. Issue situation report and warning order to the appropriate Fire Support Coordination Centers (FSCCs) and firing units.
4. Collect information on the availability and status of mortars, Field Artillery (FA), Naval Gunfire (NGF), and Close Air Support (CAS), in support of the mission.

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- 5. Select targets.
- 6. Obtain the commander’s approval of the targets.
- 7. Complete and transmit the target list portion of DA Form 5369-R.
- 8. Schedule targets on DA Form 5368-R, per the commander’s guidance.
- 9. Transmit the schedules to the firing units.
- 10. Brief the observers.
- 11. Report to the commander when the firing units are ready.
- 12. Amend the plan, as necessary, based on the situation and the commander’s desires.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

TASK: 0861.04.10 (CORE PLUS) LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAMMS

CONDITION(S): Given the target production map, the visibility overlay, target acquisition visibility diagrams, plotting equipment, an assistant, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Plot the visibility diagrams on the visibility overlay.
- 2. Identify all defilade areas.
- 3. Recommend moving target acquisition assets to reduce the defilade areas.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 4. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
- 2. 0332, Reconnaissance Marine

TASK: 0861.04.12 (CORE PLUS) EVALUATE TARGETING INFORMATION

CONDITION(S): Given a target production map, the Target Selection Standards (TSS), current friendly and enemy situations, incoming messages, Shell Reports (SHELREPs), and the references.

STANDARD(S): Per the references.

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PERFORMANCE STEPS:

1. Record and post Shell Report (SHELREP) information.
2. Check the grid report against the Target Selection Standards (TSS).
3. Record the targets and suspected targets.
4. Plot the targets and suspected targets on the target production map.
5. Check new information and Shell Reports (SHELREPs) for correlation with posted suspected targets and rays.
6. Post correlated information to appropriate target cards (when target indicators become targets, per Target Selection Standards (TSSs)).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Cpl

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
4. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
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TASK: 0861.04.13 (CORE PLUS) INFORM FIELD ARTILLERY HEADQUARTERS AND FIRE SUPPORT COORDINATION CENTERS (FSCCs) OF THE SUPPORTED UNIT'S SCHEME OF MANEUVER AND FIRE SUPPORT PLAN

CONDITION(S): Given the maneuver commander's guidance and/or the Operations Order (OPORD), a fire support plan/matrix, the situation map, a target list, plotting equipment, communications with higher and lower Fire Support Coordination Centers (FSCCs), the artillery Fire Direction Center (FDC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Extract the scheme of maneuver.
2. Transmit the scheme of maneuver to artillery Fire Direction Center (FDC), higher and lower Fire Support Coordination Centers (FSCCs), and/or Forward Observer (FO) teams.
3. Monitor the maneuver situation for changes.
4. Determine and transmit changes of the fire support requirements to the appropriate agency.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20-30, Fire Support For Corps and Division
 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 5. MCWP 3-42.1, Fire Support in MAGTF Operations
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TASK: 0861.04.14 (CORE PLUS) INFORM SUPPORTED MANEUVER COMMANDER OF THE FIELD ARTILLERY’S TACTICAL MISSIONS AND CORRESPONDING ARTILLERY FIRE PLAN TO SUPPORT THE SCHEME OF MANEUVER

CONDITION(S): Given the maneuver commander’s guidance and/or the Operations Order (OPORD), a fire support plan/matrix, the situation map, a target list, plotting equipment, communications with higher and lower Fire Support Coordination Centers (FSCCs), the artillery Fire Direction Center (FDC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Monitor the fire support plan.
2. Brief the supported unit on the field artillery tactical mission.
3. Brief the supported unit on the artillery fire plan.
4. Brief target acquisition means to the commander.
5. Inform the supported unit of any changes or deviations resulting from combat development or the tactical situation.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20-30, Fire Support For Corps and Division
2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
3. FM 6-20-50, Fire Support For Brigade Operations (Light)
4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
5. MCWP 3-42.1, Fire Support in MAGTF Operations

TASK: 0861.04.15 (CORE PLUS) COORDINATE FIRES ACROSS BOUNDARIES

CONDITION(S): Given a tactical scenario, a situation map complete with boundaries and Fire Support Coordination Measures (FSCM), plotting equipment, a situation overlay, a fire support status chart, the commander’s concept of operations, a functioning Fire Support Coordination Center (FSCC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Plot targets.
2. Determine the zone in which the target is located.
3. Coordinate the fire request with other affected fire support means (air, artillery, naval surface fire support, and mortars).
4. Contact the appropriate fire support agency or Fire Support Coordination Center (FSCC), as necessary.
5. Use the fastest and most appropriate coordination net.
6. Coordinate, if necessary, with the appropriate agencies by voice or digital means.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)

2. FM 6-20-50, Fire Support For Brigade Operations (Light)
 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 4. MCWP 3-42.1, Fire Support in MAGTF Operations
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TASK: 0861.04.16 (CORE PLUS) ANALYZE TARGETS TO DETERMINE PRECEDENCE AND TYPES AND QUANTITIES OF FIRE TO BE USED FOR ENGAGING TARGETS

CONDITION(S): Given a Fire Support Coordination Center (FSCC) with all necessary equipment, commander's guidance, a target list, a high payoff target list, an attack guidance matrix, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine which target set the target belongs to.
2. Determine if the target type has been designated for special priority or attack.
3. Determine precedence of attack from the high payoff target list.
4. Examine the attack guidance matrix for general target set and specific target type attack instructions.
5. Pass the target, along with the recommended type and quantity of fire, to the correct attack agency or agencies.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20-30, Fire Support For Corps and Division
 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
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TASK: 0861.04.17 (CORE PLUS) PASS FIRE SUPPORT INFORMATION TO LOWER, ADJACENT, AND HIGHER FIELD ARTILLERY ELEMENTS

CONDITION(S): Given the situation map, a target list, plotting equipment, a fire support status chart, a fire support capabilities overlay, the commander's concept of operations, a functioning Fire Support Coordination Center (FSCC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Provide targeting information for planned targets.
2. Relay fire missions on targets of opportunity, as required.
3. Determine and/or disseminate fire support measures.
4. Determine observer status.
5. Disseminate targeting priorities and target attack procedures list.
6. Provide additional fire support guidance to Forward Observer (FO) teams.
7. Coordinate positional approval and clearance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-20-30, Fire Support For Corps and Division
- 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 5. MCWP 3-42.1, Fire Support in MAGTF Operations

TASK: 0861.04.18 (CORE PLUS) MONITOR/COORDINATE REQUESTS FOR NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given the situation map, plotting equipment, Naval Gunfire (NGF) support, Naval Gunfire Liaison Officer (NGLO) to provide assistance, a situation overlay, a fire support status chart, a fire support capability overlay, a functioning Fire Support Coordination Center (FSCC), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Monitor the Call For Fire (CFF) or request for Naval Gunfire (NGF) support.
- 2. Determine whether the request should be approved on the basis of the use of organic maneuver weapons, field artillery, air, and the application of fire support coordination principles.
- 3. Coordinate with all necessary fire support agencies to provide safe and integrated fires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 4. MCWP 3-42.1, Fire Support in MAGTF Operations

TASK: 0861.04.19 (CORE PLUS) COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION

CONDITION(S): Given the situation map, plotting equipment, a situation overlay, a fire support status chart, a target list, a fully manned Fire Support Coordination Center (FSCC), and a Joint Tactical Airstrike Request (JTAR).

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Evaluate the use of other fire support systems, in lieu of the requested Close Air Support (CAS).
- 2. Determine and resolve potential air-space conflicts.
- 3. Coordinate the request with other fire support representatives, as required.
- 4. Integrate the close air strike with indirect fire support assets.
- 5. Recommend appropriate safeguards and coordinating measures to provide safe and integrated employment.

6. Ensure the Joint Tactical Airstrike Request (JTAR) is properly completed and forward it to the appropriate agency.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FMFM 5-4, Offensive Air Support
4. FMFM 5-4A, Close Air Support and Close-In Fire Support
5. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
6. MCWP 3-42.1, Fire Support in MAGTF Operations

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller
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TASK: 0861.04.20 (CORE PLUS) COORDINATE A REQUEST FOR IMMEDIATE CLOSE AIR SUPPORT (CAS)

CONDITION(S): Given the situation map, plotting equipment, a situation overlay, a fire support status chart, a target list, a fully manned Fire Support Coordination Center (FSCC), a Joint Tactical Airstrike Request (JTAR), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Monitor the Joint Tactical Airstrike Request (JTAR) as it is sent to the Direct Air Support Center (DASC).
2. Evaluate the use of other fire support system, in lieu of the requested Close Air Support (CAS).
3. Determine and resolve potential air-space conflicts.
4. Coordinate the request with other fire support representatives, as required.
5. Integrate the close air strike with indirect fire support assets.
6. Recommend appropriate safeguards and coordinating measures to provide safe and integrated employment.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FMFM 5-4, Offensive Air Support
4. FMFM 5-4A, Close Air Support and Close-In Fire Support
5. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
6. MCWP 3-42.1, Fire Support in MAGTF Operations

PERFORMANCE SUPPORT TOOL(S):

1. Forward Air Controller

ADMINISTRATIVE INSTRUCTIONS: Control of fire support is ashore.

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TASK: 0861.04.21 (CORE PLUS) ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)

CONDITION(S): Given a list of Fire Support Coordination Measures (FSCM), a map covering the area to which the FSCMs apply, plotting equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Draw Fire Support Coordination Measures (FSCMs) given.
- 2. Explain the meaning of all Fire Support Coordination Measures (FSCMs) and how they relate to the scheme of maneuver.
- 3. Disseminate Fire Support Coordination Measures (FSCMs), as appropriate.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-20-30, Fire Support For Corps and Division
- 2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 3. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 4. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 5. MCWP 3-42.1, Fire Support in MAGTF Operations

TASK: 0861.04.22 (CORE PLUS) PLAN/COORDINATE FIRE SUPPORT TO SUPPRESS ENEMY AIR DEFENSE

CONDITION(S): Given the situation map, plotting equipment, a situation overlay, a preplanned or immediate Close Air Support (CAS) request, a fire support status chart, commander's guidance, a target list, a high payoff target list, attack guidance matrix, a functioning Fire Support Coordination Center and known enemy Air Defense Artillery (ADA) targets, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine what threat Air Defense Artillery (ADA) systems are in your zone.
- 2. Plan fires on Air Defense Artillery (ADA) targets.
- 3. Select the best agency to locate or observe the Air Defense Artillery (ADA) targets.
- 4. Monitor Close Air Support (CAS) requests (planned and immediate) and coordinate Suppression Enemy Air Defense (SEAD) fires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
- 2. FM 6-20-50, Fire Support For Brigade Operations (Light)
- 3. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
- 4. MCWP 3-42.1, Fire Support in MAGTF Operations

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller

TASK: 0861.04.23 (CORE PLUS) ADVISE THE MANEUVER COMMANDER ON EMPLOYMENT OF AVAILABLE TARGET ACQUISITION ASSETS, THEIR CAPABILITIES, AND LIMITATIONS

CONDITION(S): Given the situation map, the visibility overlay, plotting equipment, a functioning Fire Support Coordination Center (FSCC), the maneuver commander's scheme of maneuver, the operations order, the field artillery support plan, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the available target acquisition assets.
2. Determine which assets are controlled by the commander and from which assets he can request support.
3. Advise the maneuver commander of the capabilities and limitations of the target acquisition asset available.
4. Advise the commander on employing or tasking target acquisition assets.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. FM 6-20-30, Fire Support For Corps and Division
3. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
4. FM 6-20-50, Fire Support For Brigade Operations (Light)
5. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
6. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
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TASK: 0861.04.24 (CORE PLUS) COORDINATE/PREPARE THE FIRE SUPPORT PORTION OF ANNEX C (OPERATIONS) AND THE FIRE SUPPORT APPENDIX (APPENDIX 12) OF THE MANEUVER OPERATION ORDER (OPORD)

CONDITION(S): Given the commander's guidance, the scheme of maneuver or plan for defense, current Intelligence Preparation of the Battlefield (IPB), concept of operations, artillery organization for combat, a list of other fire support assets available, input from all fire support representatives, a target list, a Fire Support Coordination Center (FSCC) with all personnel and equipment, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine the fire support tasks and priorities.
2. Assign tasks to the fire support assets available.
3. Ensure any restrictions on firing or munitions are included.
4. Complete the fire support portion of Annex C (Operations).
5. Prepare Appendix 12 (Fire Support) to Annex C (Operations) to the Operations Order (OPORD).
6. Write and/or collect the applicable TABS to the fire support appendix.
 - a. Prepare the Air Fire Plan, if applicable.

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- b. Prepare the Artillery Fire Plan, if applicable. Ensure adherence to the tactical principles of artillery employment.
 - c. Prepare the Naval Surface Fire Support Plan, if applicable.
 - d. Prepare the Chemical Fire Plan, if applicable.
 - e. Prepare the Target List.
 - f. Prepare the Fire Support Coordination Plan.
 - g. Prepare the Fire Support Communication Plan.
 - h. Prepare the Countermechanized Fire Plan, if applicable.
 - i. Prepare Enemy Air Defense Plan, if applicable.
7. Write and/or collect the applicable enclosures to the various Tabs.
8. Coordinate the fire support plan with the maneuver commander or his representative Fire Support Coordinator (FSC).
9. Forward the work for approval.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. FMFM 1-7, Supporting Arms in Amphibious Operations
 - 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
 - 3. MCWP 3-16.1, Marine Artillery Support
 - 4. MCWP 3-42.1, Fire Support in MAGTF Operations
 - 5. MCWP 5-1, Command and Staff Action
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TASK: 0861.04.25 (CORE PLUS) PLAN FIRE SUPPORT FOR OFFENSIVE OPERATIONS

CONDITION(S): Given a Fire Support Coordination Center (FSCC) with all necessary equipment, the scheme of maneuver, the higher echelon's Operations Order (OPORD), an intelligence summary, Intelligence Preparation of the Battlefield (IPB), the commander's and Fire Support Coordinator's (FSC) guidance, the target list, Target Selection Standards (TSS), and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Obtain the mission and guidance from the commander and the Fire Support Coordinator (FSC).
- 2. Determine the fire support and target acquisition assets available.
- 3. Obtain the IPB and the current intelligence summary from the S-2.
- 4. Recommend the priority target list.
- 5. Plan target acquisition of priority targets.
- 6. Plan fires on all known or suspected enemy locations and critical areas.
- 7. Plan the targets and schedules of fire required by the commander, to include both lethal and nonlethal electronic attack targets.
- 8. Assign the targets to the appropriate fire support asset.
- 9. Select the time and duration of fires for each target.

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10. Annotate the preparation fires, groups, series, and programs of targets on the scheduling worksheets.
11. Plan targets and fires to meet contingencies.
12. Recommend and plan fire support coordination measures.
13. Prepare the fire support plan and/or fire support matrix.
14. Obtain the commander's approval of the fire support plan.
15. Disseminate the approved fire support plan to the appropriate agencies.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20, Fire Support in Airland Battle
2. FM 6-20-30, Fire Support For Corps and Division
3. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
4. FM 6-20-50, Fire Support For Brigade Operations (Light)
5. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
6. MCWP 3-16.1, Marine Artillery Support
7. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0322, The 81mm Mortar Crewman
3. 0331, 81mm Mortar NCO
4. 0382, Infantry Squad Leader: Weapons and Fire Support

TASK: 0861.04.26 (CORE PLUS) PLAN FIRE SUPPORT FOR DEFENSIVE OPERATIONS

CONDITION(S): Given a Fire Support Coordination Center (FSCC) with all necessary equipment, the scheme of defense, the barrier and obstacle plan, the higher echelon's Operation Order (OPORD), an intelligence summary, Intelligence Preparation of the Battlefield (IPB), the commander's guidance, the Fire Support Coordinator's (FSC) guidance, the target list, and Target Selection Standards (TSS) and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Obtain the mission, and guidance from the commander and the Fire Support Coordinator (FSC).
2. Determine the fire support and target acquisition assets available.
3. Obtain the Intelligence Preparation of the Battlefield (IPB) and the current intelligence summary from the S-2.
4. Recommend the priority target list.
5. Plan target acquisition of priority targets.
6. Plan the targets and schedules of fire required by the commander, to include both lethal and nonlethal electronic attack targets.
7. Plan fires to support the barrier and obstacle plan.

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8. Plan fires in front of the position to the limits of visibility, on top of the position, and behind the position.
9. Assign the target to the appropriate fire support asset.
10. Select the time and duration of fires for each target.
11. Annotate counterpreparation fires and Final Protective Fires (FPFs) on the scheduling worksheets.
12. Plan targets and fires to support contingencies and a counterattack, if necessary.
13. Plan targets and fires for alternate positions.
14. Plot patrol routes on the situation map and/or submit patrol routes to the senior Fire Support Coordination Center (FSCC).
15. Recommend and plan fire support coordination measures.
16. Prepare the fire support plan and/or fire support matrix.
17. Obtain the commander's approval of the fire support plan.
18. Disseminate the approved fire support plan to the appropriate agencies.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. FM 6-20, Fire Support in Airland Battle
2. FM 6-20-30, Fire Support For Corps and Division
3. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
4. FM 6-20-50, Fire Support For Brigade Operations (Light)
5. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
6. MCWP 3-16.1, Marine Artillery Support
7. MCWP 3-42.1, Fire Support in MAGTF Operations

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0321, The M240G Machinegunner
3. 0322, The 81mm Mortar Crewman
4. 0331, 81mm Mortar NCO
5. 034, Landmine Warfare, Demolitions, and Breaching Operations
6. 0365, Anti-Armor Operations
7. 0368, The Heavy Machinegun Crewman
8. 0382, Infantry Squad Leader: Weapons and Fire Support

TASK: 0861.04.27 (CORE PLUS) INTEGRATE COMPANY ORGANIC INDIRECT FIRE WEAPONS INTO FIRE PLANS

CONDITION(S): Given the maneuver commander's guidance, the company's scheme of maneuver, current intelligence, the reference, and the order from the commander to plan the fires of the company's organic indirect fire weapons.

STANDARD(S): Per the reference.

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PERFORMANCE STEPS:

1. Obtain and keep current information on weapon positions.
2. Know weapon characteristics, status, and capabilities.
3. Coordinate the plan with the Weapon Platoon Commander, if possible.
4. Coordinate the plan.
5. Disseminate the plan to the appropriate agencies.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
2. 0321, The M240G Machinegunner
3. 0322, The 81mm Mortar Crewman
4. 0331, 81mm Mortar NCO
5. 034, Landmine Warfare, Demolitions, and Breaching Operations
6. 0365, Anti-Armor Operations
7. 0368, The Heavy Machinegun Crewman
8. 0382, Infantry Squad Leader: Weapons and Fire Support

TASK: 0861.04.28 (CORE PLUS) BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE GENERAL MISSION AND CHARACTERISTICS OF NAVAL GUNFIRE (NGF) EMPLOYED IN AN AMPHIBIOUS OPERATION

CONDITION(S): Given a mission to provide Naval Gunfire (NGF) support, an operation order, the commander's guidance, an intelligence summary, a map, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. State the mission of Naval Gunfire (NGF) in the amphibious operation.
2. State the three groups of targets of Naval Gunfire (NGF).
3. State the three subgroups of an amphibious task force and their missions.
4. State the three main phases of the amphibious operation and the principle tasks associated with those phases.
5. Explain the seven capabilities of Naval Gunfire (NGF).
6. State the general capabilities of Naval Gunfire (NGF).
7. State the six broad classifications of Naval Gunfire (NGF), per effect on the target.
8. State the eleven classifications of tactical Naval Gunfire (NGF).
9. State the three classifications of Naval Gunfire (NGF).
10. Classify fires by types (4).
11. Classify fires by technique (2).

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INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Sgt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
3. MCWP 3-42.1, Fire Support in MAGTF Operations
4. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

TASK: 0861.04.29 (CORE PLUS) BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE CAPABILITIES AND LIMITATIONS OF NAVAL GUNFIRE (NGF) SUPPORT FOR AN AMPHIBIOUS OPERATION

CONDITION(S): Given a mission to provide Naval Gunfire (NGF) support, an operations order, commander's guidance, an intelligence summary, a map, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. State the seven types of Naval Gunfire (NGF) support ships and the ship "classes" to which they correspond.
2. State the type of NGF support ship used commonly in direct support.
3. State the type of NGF support ship used commonly in general support.
4. State Naval Gunfire (NGF) assets available, including weapons systems, munitions, rates of fire, and maximum ranges.
5. State the seven considerations which will determine the employment of Naval Gunfire (NGF) during advance force operations.
6. State the three planning considerations confronting the commanders once the decision to employ an advance force is made.
7. State the five types of Naval Gunfire (NGF) employed during the assault phase and the establishment of a beachhead phase of the operation.
8. State the tasks of Naval Gunfire (NGF) during landing (D-day).
9. State the mission of Naval Gunfire (NGF) after landing.

INITIAL TRAINING SETTING: FLC Sustainment: 6 Req By: Sgt

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination
3. MCWP 3-42.1, Fire Support in MAGTF Operations
4. NWP 3-09.11M/FMFM 1-7, Supporting Arms in Amphibious Operations

DUTY AREA 05 - COUNTERFIRE

TASK: 0861.05.01 (CORE PLUS) PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS

CONDITION(S): In a tactical or nontactical situation, under any weather condition, and given the following: Low-angle fuze quick artillery crater; Usable fuze furrow; Declinated aiming circle, M2 compass (preferred), or a lensatic compass; D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation.); WD-1 (communication wire) or a length of rope, wire, or string; Map of local area; Plotting equipment.

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STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Perform crater analysis for low-angle fuze quick craters.
2. Perform crater analysis for low-angle fuze delay craters.
3. Make the proper report to S-2.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: Pvt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCWP 3-16.1, Marine Artillery Support
3. MCWP 3-16.3, Field Artillery Cannon Battery
4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence

ADMINISTRATIVE INSTRUCTIONS: The two methods of obtaining a direction to a hostile weapon from a low-angle fuze quick crater are the fuze furrow/center-of-crater method and the sidespray method. For best results, take the average of several directions, using both methods.

TASK: 0861.05.02 (CORE PLUS) PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE DELAY CRATERS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: usable fuze furrow; declinated aiming circle, M2 compass (preferred), or a lensatic compass; D-1 stakes (at least two stakes, 4 feet long - four stakes would cover any crater analysis situation); WD-1 (communications wire) or a length of rope, wire, or string; map (1:50,000 scale) of local area; plotting equipment; and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify crater formed by low-angle fuze delay.
2. Determine grid to center and direction to firing piece using proper method.
3. Collect usable shell fragments.
4. Send shell fragments and information to S-2 and/or appropriate agency.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: Pvt

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCWP 3-16.1, Marine Artillery Support
3. MCWP 3-16.3, Field Artillery Cannon Battery
4. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
5. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

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DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence

TASK: 0861.05.03 (CORE PLUS) PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: Usable high-angle crater; Declinated aiming circle, M2 compass (preferred), or a lensatic compass; D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation.); WD-1 (communication wire) or a length of rope, wire, or string; Map of local area; Plotting equipment.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

- 1. Verify crater formed by high-angle shell by looking for a deep fuze tunnel and back spray.
- 2. Determine grid of the crater.
- 3. Determine direction to hostile weapon using one of the following:
 - a. Splinter groove method.
 - b. Main axis method.
 - c. Fuze tunnel method.
- 4. Make the proper report to S-2.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: Pvt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. MCWP 3-16.1, Marine Artillery Support
- 3. MCWP 3-16.3, Field Artillery Cannon Battery
- 4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence

TASK: 0861.05.04 (CORE PLUS) PERFORM SHELL FRAGMENT ANALYSIS

CONDITION(S): In a tactical or nontactical situation, under all weather conditions, and given the following: Curvature template (to scale); DIA Projectile Fragmentation Identification Guide; Dividers and a ruler; Fragments and pieces of the projectile.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Collect and analyze shell fragments.
 - a. Determine the type of shell (e.g., mortar, rocket, artillery).
 - b. (Low order burst or dud) Determine caliber of shell using curvature template.
 - c. (High order burst) Determine caliber of shell using pieces of fins, rotating bands, or gas check bands and referring to the DIA Projectile Fragmentation Identification Guide.

- 2. Tag usable fragments. Tag must contain:
 - a. Location of crater.
 - b. Direction to hostile weapon.
 - c. Date-time group of shelling.
- 3. Send information and shell fragments to commander, FDC, or S-2.
- 4. Make the proper report to S-2.
 - a. Report grid location.
 - b. Report direction to firing guns.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: Pvt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. MCWP 3-16.1, Marine Artillery Support
- 3. MCWP 3-16.3, Field Artillery Cannon Battery
- 4. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence
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TASK: 0861.05.05 (CORE PLUS) PREPARE/SUBMIT STANDARD SHELLING, MORTARING, AND BOMBING REPORT

CONDITION(S): Given a standard Shell Report format (SHELREP), information derived from a crater and shell fragment analysis, and the references.

STANDARD(S): Per the references and within 5 minutes.

PERFORMANCE STEPS:

- 1. Complete standard report.
- 2. Send to next higher headquarters.

INITIAL TRAINING SETTING: MOJT Sustainment: 6 Req By: Pvt

REFERENCE(S):

- 1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 2. MCRP 3-16.2, Techniques and Procedures for Fire Support Coordination

DISTANCE LEARNING PRODUCT(S):

- 1. 028, Introduction to Combat Intelligence

PERFORMANCE SUPPORT TOOL(S):

- 1. Forward Air Controller
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DUTY AREA 07 - OBSERVER DIGITAL TERMINAL (ODT)

TASK: 0861.07.01 (CORE) PREPARE THE OBSERVER DIGITAL TERMINAL (ODT) FOR OPERATION

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CONDITION(S): Given an Observer Digital terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Power the Observer Digital Terminal (ODT).
2. Set Observer Digital Terminal (ODT) internal clock.
3. Load a Observer Digital Terminal (ODT) from another Observer Digital Terminal (ODT).
4. Run the digital observer program.
5. Set time.
6. Establish own name and address.
7. Set alarm and display parameters.
8. Set time of flight variable
9. Set the conversion field in the Observer Digital Terminal (ODT).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. ODT Job Aids
3. ODT Operations Manual

TASK: 0861.07.02 (CORE) ESTABLISH COMMUNICATIONS PARAMETERS WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter SET COMM data.
2. Enter subscriber data.
3. Enter default destination.
4. Enter FIST destination.
5. Enter serial numbers.
6. Assign authentication code files.
7. Perform a SET/RESYNC.
8. Transmit a digital message.
9. Receive a digital message.
10. Re-establish resynchronization.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0861.07.03 (CORE) DETERMINE OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an operational Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, a map, an M2 compass, two identifiable terrain features both visible and on the map, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine location by trilateration.
- 2. Determine location by triangulation.
- 3. Determine location by resection.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0861.07.04 (CORE) REPORT OBSERVER LOCATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an operational Observer Digital Terminal (ODT), a map of the operational area, radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter grid location and altitude.
- 2. Enter laser related data.
 - a. Visibility.
 - b. GVLLD code.
 - c. Cloud height.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0861.07.05 (CORE) PROCESS AN AREA FIRE MISSION WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with the Fire Direction Center (FDC) via Observer Digital Terminal (ODT) Job Aids, Marine Corps Fire Support System (MCFSS) Tab, pencil, paper, and the references.

STANDARD(S): Per the references, transmitting a routine/basic call for fire within 120 seconds of target identification, subsequent corrections within 30 seconds of the burst, and entering Fire For Effect (FFE) within +/- 50 meters of the target, in all three modes of approval.

PERFORMANCE STEPS:

1. Input fire request grid.
2. Process the Message to Observer (MTO).
3. Receive related command messages.
4. Transmit subsequent corrections.
5. Transmit Fire for Effect (FFE).
6. Transmit refinement data (if any), Record as Target (if desired), End of Mission (EOM), and surveillance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. ODT Job Aids
3. ODT Operations Manual
4. FM 6-30, Observed Fire Procedures
5. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

TASK: 0861.07.06 (CORE) PROCESS SPECIAL FIRE MISSIONS WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with the Fire Direction Center (FDC) via Observer Digital Terminal (ODT), Marine Corps Fire Support System (MCFSS) Tab, pencil, paper, and the references.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Process a Final Protective Fire (FPF) with and without adjustment.
2. Process a Priority Target/Known Point Assignment with and without adjustment.
3. Process a Time on Target (TOT) mission.
4. Process a Quick Smoke mission.
5. Process Illumination missions.
6. Process a Copperhead mission.
7. Fire the Final Protective Fire/Priority/Known Point.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

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REFERENCE(S):

1. MCFSS Version 9.57 SOP
 2. ODT Job Aids
 3. ODT Operations Manual
 4. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
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TASK: 0861.07.07 (CORE) CONDUCT A PRECISION REGISTRATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given a map, an Observed Fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with the Fire Direction Center (FDC) via an Observer Digital Terminal (ODT), Marine Corps Fire Support System (MCFSS) Tab, pencil, paper, a Message To Observer (MTO) from the Fire Direction Officer (FDO) initializing the precision registration, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input the Precision Registration message.
2. Determine the Observer Target (OT) factor.
3. Draw a diagram of impact of all rounds, recording the spottings to the nearest one mil.
4. Split the 100-meter bracket by requesting ADD (DROP) 50.
5. Spot the next round. Split the 50-meter bracket by requesting, "2 ROUNDS, ADD (DROP) 25", as appropriate, to obtain an opposite spotting.
6. Request, "1 ROUND, ADD (DROP) 25", as appropriate, if these rounds are spotted opposite that of the previous spotting, to make the next round impact opposite the last 2 rounds.
7. Determine and announce the range and deviation refinement data to the nearest 10 meters.
8. Announce, "RECORD AS REGISTRATION POINT, TIME REPEAT, OVER".
9. Request, "3 ROUNDS, REPEAT", once a measurable airburst is obtained.
10. Record the spotting of each round.
11. Determine the appropriate mean Height Of Burst (HOB) correction of the 4 rounds to achieve a 20-meter HOB.
12. Transmit Height Of Burst (HOB) refinement -- "HOB CORRECTION, RECORD AS TIME REGISTRATION POINT, END OF MISSION".

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
 2. ODT Job Aids
 3. ODT Operations Manual
 4. FM 6-30, Observed Fire Procedures
 5. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller
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TASK: 0861.07.08 (CORE) CONDUCT A HIGH-BURST (HB) OR MEAN-POINT-OF-IMPACT (MPI)
REGISTRATION WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given a compass, communications with the Fire Direction Center (FDC), an Observer Digital Terminal (ODT), an aiming circle or a battery commander's scope, a surveyed Observation Post (OP), orienting data, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input the High Burst/Mean-Point-of-Impact (HB/MPI) Registration message.
2. Set up instruments correctly.
3. Orient the instrument before the first round is fired, per the Fire Direction Center's (FDC) instructions.
4. Report to the Fire Direction Center (FDC) when ready to observe.
5. Measure and report the locations of the impacts and/or bursts.
6. Reorient the instrument to the location of the first round only.
7. Continue spotting until Fire Direction Center (FDC) ends the mission.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. ODT Job Aids
3. ODT Operations Manual
4. MCWP 3-16.6, Supporting Arms Observer, Spotter and Controller

TASK: 0861.07.09 (CORE PLUS) REPORT ENEMY ACTIVITY BY THE USE OF THE ARTILLERY TARGET INTELLIGENCE (ATI) MESSAGES WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input and send an ATI;GRID message.
2. Input and send an ATI;POLAR message.
3. Input and send an ATI;SHELREP message.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. ODT Job Aids
3. ODT Operations Manual

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence

TASK: 0861.07.10 (CORE PLUS) TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input the appropriate PLAN name into the PLAN message.
2. Input the appropriate Target number into the Plan message.
3. Transmit targets to the appropriate agency.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
 2. ODT Job Aids
 3. ODT Operations Manual
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TASK: 0861.07.11 (CORE PLUS) REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input the assigned point numbers.
2. Input the Forward Line Of Troops (FLOT) points' grid locations.
3. Transmit to the appropriate agency.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. ODT Job Aids
3. ODT Operations Manual

DISTANCE LEARNING PRODUCT(S):

1. 028, Introduction to Combat Intelligence
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TASK: 0861.07.12 (CORE PLUS) INPUT A TARGET IN THE KNOWN POINT FILE WITH THE OBSERVER DIGITAL TERMINAL (ODT)

CONDITION(S): Given an Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input the Known Point number into the file.
2. Input the grid location into the file.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0861.07.13 (CORE PLUS) VERIFY OBSERVER DIGITAL TERMINAL (ODT) INITIALIZATION

CONDITION(S): Given an operational Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify that all SETCOM parameters are entered correctly.
- 2. Verify the input of all INIT data.
- 3. Verify that the ODT is setup to operate as a Battalion Fire Support Coordination Center (FSCC).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0861.07.14 (CORE PLUS) VERIFY OBSERVER DIGITAL TERMINAL (ODT) INPUT MESSAGES

CONDITION(S): Given an operational Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the correct entry of the Forward Line Of Troops (FLOT) message.
- 2. Verify the correct entry of the OBLOC message.
- 3. Verify the correct entry of the ATI message.
- 4. Verify the correct entry of the FIREPLAN message.
- 5. Verify the correct entry of a target in the Known Point file.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. ODT Job Aids
- 3. ODT Operations Manual

TASK: 0861.07.15 (CORE PLUS) SUPERVISE THE PROCESSING OF A FIRE REQUEST FROM AN OBSERVER DIGITAL TERMINAL (ODT) EQUIPPED BATTALION FIRE SUPPORT COORDINATION CENTER (FSCC)

Annex X to
Appendix F to
ENCLOSURE (3)

CONDITION(S): Given an operational Observer Digital Terminal (ODT), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Direct the Observer Digital Terminal (ODT) operator to make required adjustments to process fire requests with an ODT equipped battalion Fire Support Coordination Center (FSCC) in the FSCC approval mode.
2. Supervise the processing of a Fire For Effect (FFE) mission in the Fire Support Coordination Center (FSCC) approval mode.
3. Direct the Observer Digital terminal (ODT) operator to make required adjustments to process fire requests with an ODT equipped battalion Fire Support Coordination Center (FSCC) in the CENTRALIZE mode.
4. Supervise the processing of a Fire For Effect (FFE) mission in the CENTRALIZE mode.
5. Direct the Observer Digital Terminal (ODT) operator to make required adjustments to process fire requests with an ODT equipped battalion Fire Support Coordination Center (FSCC) in the AUTONOMOUS mode.
6. Supervise the processing of a Fire For Effect (FFE) mission in the AUTONOMOUS mode.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. ODT Job Aids
3. ODT Operations Manual

DUTY AREA 08 - LIGHTWEIGHT COMPUTER UNIT (LCU) OPERATIONS

TASK: 0861.08.01 (CORE PLUS) PREPARE THE LIGHTWEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STCP) FOR OPERATIONS

CONDITION(S): Given an operational Lightweight Computer Unit (LCU), radios, encryption devices, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Identify the components of the Lightweight Computer Unit (LCU).
2. Cable the Lightweight Computer Unit (LCU).
3. Perform power up procedures.
4. Prepare the Program Load Unit (PLU).
5. Prepare the Lightweight Computer Unit (LCU).
6. Begin program load.
7. Set-up peripheral devices.
8. Identify CURRENT and PLANNING LCU.
9. Set system date/time.
10. Restore a Salvage Point Recording (SPR).

- 11. Record a Salvage Point Recording (SPR).
- 12. Perform power down procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. LCU Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. ODT Job Aids
- 4. ODT Operations Manual
- 5. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: Ensure all safety precautions are taken in accordance with the applicable TMs.

TASK: 0861.08.02 (CORE PLUS) PREPARE LIGHTWEIGHT COMPUTER UNIT (LCU) DUAL TERMINAL COMMAND POST (DTCP) FOR OPERATIONS

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Lightweight Computer Unit (LCU), radios, encryption devices, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Assign peripheral device status.
- 2. Clear print buffer.
- 3. Establish Artillery Target Intelligence (ATI) mode of operations.
- 4. Establish target block and date/time.
- 5. Establish the Map Modification.
- 6. Initialize the Graphic Display Area.
- 7. Display all graphic data.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

- 1. LCU Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. ODT Job Aids
- 4. ODT Operations Manual
- 5. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.03 (CORE PLUS) ESTABLISH COMMUNICATION PARAMETERS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given two Lightweight Computer Units (LCUs), radios, encryption devices, Task Organization subscriber table, and the references.

STANDARD(S): Per the references.

Annex X to
Appendix F to
ENCLOSURE (3)

PERFORMANCE STEPS:

1. Establish net settings.
2. Establish subscriber data.
3. Establish multi-subscriber groups.
4. Establish Default subscriber.
5. Establish Legal Messages.
6. Establish Message of Interest.
7. Change Priority Classification Logging and Display.
8. Establish station as a distant station in a RELAY scheme.
9. Establish DMD RELAY.
10. Re-establish synchronization between Lightweight Computer Units (LCUs).
11. Re-establish synchronization with a Battery Computer System (BCS) and Observer Digital Terminal (ODT).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. LCU Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.08.04 (CORE PLUS) VERIFY LIGHTWEIGHT COMPUTER UNIT (LCU) SETUP CONFIGURATIONS

CONDITION(S): Given an operational Lightweight Computer Unit (LCU), radios, encryption devices, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify that all peripheral equipment are present.
2. Verify that all cables are properly connected for Single Terminal Command Post (STCP) configuration.
3. Verify that the proper power up procedures are performed.
4. Verify that the proper power down procedures are performed.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. LCU Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.08.05 (CORE PLUS) VERIFY INITIALIZATION DATA WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), radios, encryption devices, and the references.

Annex X to
Appendix F to
ENCLOSURE (3)

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the correct input of a time hack, received by voice, into the computer.
2. Verify the appropriate Artillery Target Intelligence Mode of operation is entered into the computer.
3. Verify the input of an assigned target block into the computer.
4. Verify the correct assignment of peripheral devices.
5. Verify the input of the Map Center.
6. Verify the restoration of a previously recorded Salvage Point Recording (SPR).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. LCU Job Aids
2. MCFSS Version 9.57 SOP
3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.06 (CORE PLUS) VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given an operational Lightweight Computer Unit (LCU), radios, encryption devices, Task Organization subscriber table, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Ensure all digital net parameters are entered correctly in the NET SETTING file.
2. Verify all required Subscriber data is entered in the SUBSCRIBER file.
3. Verify all required messages are made legal in the LEGAL MESSAGE file.
4. Verify modifications to the Priority Classification and Display file are entered.
5. Verify the establishment of Digital Message Device (DMD) relay setup.
6. Verify the establishment of computer as a distant station in a RELAY scheme.
7. Ensure the correct transmission of the AUTO resync message when maintaining digital synchronization within the Lightweight Computer Unit (LCU).

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. LCU Job Aids
2. MCFSS Version 9.57 SOP
3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.07 (CORE PLUS) INPUT DATA INTO THE SUPPORT PROGRAM OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), radios, encryption devices, and the references.

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ENCLOSURE (3)

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter, edit, and delete the following Battlefield Geometry messages:
 - a. Forward Line Of Troops (FLOT).
 - b. CF Fire Support Coordination Line (FSCL).
 - c. DSA.
 - d. LFSZ.
 - e. Restricted Fire Line (RFL).
 - f. Airspace Coordination Area (ACA).
 - g. ZONE.
2. Enter and retrieve data from the Survey Control Point file.
3. Transmit Radar Search Message to the Q-46.
4. Transmit Radar Zone Message to the Q-46.
5. Selectively remove geometry from the graphics display.
6. Change the line types used to display geometry on the graphics display.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

REFERENCE(S):

1. LCU Job Aids
2. MCFSS Version 9.57 SOP
3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.08 (CORE PLUS) INPUT DATA INTO THE AMMUNITION AND FIRE UNIT INFORMATION FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), a Single Terminal Command Post, radios, encryption devices, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter a fire unit location.
2. Enter an initial fire unit ammunition message.
3. Establish critical ammunition level.
4. Establish controlled supply rate.
5. Store registration corrections.
6. Transmit AFU sums data, and ALL data.
7. Print a fire unit SITREP.
8. Complete a Battalion AFU;SR.
9. Request AFU DATA from another Lightweight Computer Unit (LCU) by the use of the AFU;COMD function.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: LCpl

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ENCLOSURE (3)

REFERENCE(S):

- 1. LCU Job Aids
- 2. MCFSS Version 9.57 SOP
- 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.09 (CORE PLUS) INPUT COMMANDER’S CRITERIA INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), MCFSS Tab, commander’s guidance, an operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Establish and update the Commander’s Modification file.
- 2. Establish fire unit selection and battalion association.
- 3. Establish Max Volleys.
- 4. Exclude specific fire units from selection.
- 5. Establish volume of fire and desired effects on target.
- 6. Establish fore mission center files.
- 7. Delete an FM;CENTER file.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS Version 9.57 SOP
- 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.10 (CORE PLUS) PROCESS A FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), Battery Computer System (BCS), Fire Support Coordination Center (FSCC) Lightweight Computer Unit (LCU), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, digital communications with an observer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Receive and process an adjust fire mission in the Fire Support Coordination Center (FSCC) fire mission approval mode.
- 2. Process subsequent corrections.
- 3. Record all fire mission data.
- 4. Recalculate a fire mission request.
- 5. Re-display fire commands out of the fire mission file.
- 6. Receive and process a Fire For Effect (FFE) mission in the CENTRALIZE mode.

7. Receive and process a Fire For Effect (FFE) mission in the AUTONOMOUS mode.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

1. BCT Job Aids
2. LCU Job Aids
3. MCFSS Version 9.57 SOP
4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.11 (CORE PLUS) PROCESS A SPECIAL FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), Battery Computer System (BCS), Battalion Fire Support Coordination Center (FSCC) Lightweight Computer Unit (LCU), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, digital communications with an observer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Receive and process the following special missions in the Fire Support Coordination Center (FSCC) approval mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.
2. Receive and process the following special missions in the CENTRALIZED mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.
3. Receive and process the following special missions in the AUTONOMOUS mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.

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- d. Quick smoke mission.
- e. Illumination missions.
- f. Copperhead missions.
- g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
- h. Registration missions.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS Version 9.57 SOP
- 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.12 (CORE PLUS) INPUT AND RETRIEVE TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), a Single Terminal Command Post, radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter the following Artillery Target intelligence (ATI) reports:
 - a. Coordinate Report (ATI;CDR).
 - b. Shell Report (ATI;SHR).
 - c. Azimuth Report (ATI;AZR).
 - d. Surveillance Report (ATI;SVL).
 - e. Combat Target Intelligence (ATI;CBTI).
- 2. Perform the retrieval of targets from target file that may meet more than one (1) search criteria by the use of the Artillery Target Intelligence (ATI) Search message.
- 3. Perform the automatic search and retrieval of targets that meet one (1) or more search criteria from an ATI MODE 3 computer by the use of the ATI;QUERRY XMIT TO ME message function.
- 4. Complete and transmit a Standing Request for Information to an ATI MODE 3 computer, for incoming targets that meet one (1) or more criteria.
- 5. Select targets from target file that meet a specific search criteria into a Fire Plan List by the use of the Artillery Target Intelligence (ATI) Prepare Fire Plan message (ATI;PREFP).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS Version 9.57 SOP

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4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.13 (CORE PLUS) MODIFY THE ATI MODE 3 MODIFICATION FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), a Single Terminal Command Post, radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Input the following Artillery Target Intelligence (ATI) Modifications file messages:
 - a. ATI;SVMOD.
 - b. ATI;FMMOD.
 - c. ATI;TBMOD.
 - d. ATI;DPMOD.
 - e. ATI;STAT.
2. Input data into the following Artillery Target Intelligence (ATI) Command Target reports:
 - a. ATI;TRY.
 - b. ATI;COMB.
 - c. ATI;SPLIT.
3. Print ATI MODE 3 target file by the use of the ATI USER COMMAND message.
4. Print all Standing Requests for Information posted in the ATI MODE 3 computer by the use of the ATI USER COMMAND messages.
5. Transmit specific target criteria parameters to another ATI MODE 3 computer by the use of the ATI;CRIT message.
6. Print the ATI MOD FILE, Range error, and Location error tables.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

1. BCT Job Aids
 2. LCU Job Aids
 3. MCFSS Version 9.57 SOP
 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.08.14 (CORE PLUS) COMPUTE A NONNUCLEAR FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), a Single Terminal Command Post, radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references, and within 20 minutes.

PERFORMANCE STEPS:

1. Build a fire plan (NNFP;CMD).

2. Name a fire plan and establish the Commander's Modification file (NNFP;COMD).
3. Make changes to the fire plan Modification file, as necessary (NNFP;COMD).
4. Establish fire unit selection and Battalion association of fire units (NNFP;FUSEL).
5. Establish Max Vol (NNFP;FUSEL).
6. Exclude specific fire units from selection (NNFP;XCLUDE).
7. Establish volume of fire and desired effects on target (NNFP;ATTACK).
8. Print the fire plan mod file for review (NNFP;COMD).
9. Add fire units and ammunition to the plan (NNFP;BUILD).
10. Add geometry to the plan (SPRT;BUILD).
11. Search target files for targets (ATI;SEARCH).
12. Include targets in the fire plan list (NNFP;FPLST) by the use of the NNFP;FPTU and ATI;PREFP.
13. Instruct the movement of targets in the NNFP;PFLST by the use of the NNFP;INSTR message.
14. Print the NNFP;FPTGT list (NNFP;COMD).
15. Compute the fire plan.
16. Transmit the targets in the schedule of fires (NNFP;TISF).
17. Review fire plan commands by the use of the NNFP;EXECFP message.
18. Transmit Fire Commands.
19. Perform file maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

1. BCT Job Aids
2. LCU Job Aids
3. MCFSS Version 9.57 SOP
4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.08.15 (CORE PLUS) COMPUTE A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given an STCP LCU, radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Build a Family of Scatterable Mines (FASCAM) plan (NNFP;COMD).
2. Name a Family of Scatterable Mines (FASCAM) plan and establish the Commander's Modification file (NNFP;COMD).
3. Make changes to the fire plan Modification file, as necessary (NNFP;COMD).
4. Establish fire unit selection and Battalion association of fire units (NNFP;FUSEL).

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5. Establish Max Vol (NNFP;FUSEL).
6. Exclude specific fire units from selection (NNFP;XCLUDE).
7. Print the fire plan mod file for review (NNFP;COMD).
8. Add fire units and ammunition to the plan (NNFP;BUILD).
9. Add geometry to the plan (SPRT;BUILD).
10. Input minefield center and engagement parameters.
11. Reserve a fire unit (NNFP;RESFU).
12. Transmit the Fire Commands to the firing unit.
13. Perform file maintenance.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: LCpl

REFERENCE(S):

1. BCT Job Aids
 2. LCU Job Aids
 3. MCFSS Version 9.57 SOP
 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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DUTY AREA 09 - LIGHTWEIGHT COMPUTER UNIT (LCU) SUPERVISION

TASK: 0861.09.01 (CORE PLUS) VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), radios, encryption devices, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Determine grid coordinate points from a 1:50,000 scale map to be entered as the following types of Battlefield Geometry:
 - a. NFA.
 - b. Free Fire Area (FFA).
 - c. Airspace Coordination Area (ACA).
 - d. Coordinated Fire Line (CFL).
 - e. SFZ.
 - f. Forward Line Of Troops (FLOT).
2. Verify the naming and entry of all types of Battlefield Geometry into the computer.
3. Direct the automatic search and retrieval of SUPPORT data that might be present in another computer by the use of the Support Command XMIT TO ME function.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. LCU Job Aids
2. MCFSS Version 9.57 SOP

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ENCLOSURE (3)

3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.09.02 (CORE PLUS) VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given two Single Terminal Command Post (STCP) Lightweight Computer Units (LCUs), radios, encryption devices, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify all fields entered in the AFU;UPDATE message.
2. Verify all fields entered in the Battalion Ammunition Update message.
3. Verify the accuracy of data entered in the Mission Fired Report message (AFU;MFR).
4. Direct the automatic search and retrieval of all fire unit data that might be present in another computer by the use of the Ammunition Fire Unit Command XMIT TO ME function.

INITIAL TRAINING SETTING: MOJT Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. LCU Job Aids
 2. MCFSS Version 9.57 SOP
 3. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.09.03 (CORE PLUS) VERIFY THE INPUT OF COMMANDER’S CRITERIA INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Dual Terminal Command Post (DTCP) Lightweight Computer Unit (LCU), Marine Corps Fire Support System (MCFSS) Tab, commander’s guidance, an operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the input of data into the Fire Mission Modification File (FM;MOD).
2. Direct the ordering of fire units into the Fire Unit Selection File (FM;FUSEL).
3. Direct the entry of Maximum Volley into the Fire Unit Selection File (FM;FUSEL).
4. Direct the exclusion of a particular fire unit, fuze, and/or shell from being considered by the use of the Fire Exclusion File (FM;XCLUDE).
5. Verify the input and modification of Commander’s Attack Guidance into the Fire Mission Attack File (FM;ATTACK).
6. Supervise the processing of the following special missions in the CENTRALIZED mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.

- f. Copperhead missions.
- g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
- h. Registration missions.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. BCT Job Aids
 - 2. LCU Job Aids
 - 3. MCFSS Version 9.57 SOP
 - 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.09.04 (CORE PLUS) SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), Battery Computer System (BCS), Battalion Fire Direction Center (FDC) Lightweight Computer Unit (LCU), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, digital communications with an observer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Supervise the processing of an adjust fire mission in the Fire Support Coordination Center (FSCC) approval mode.
- 2. Supervise the processing of an adjust fire mission in the CENTRALIZE mode.
- 3. Supervise the processing of an adjust fire mission in the AUTONOMOUS mode.
- 4. Direct the Battlefield Communication Terminal (BCT) operator to deny a fire request.
- 5. Direct the automatic search and retrieval of all observer location data that might be present in another computer by the use of the Fire Mission Command XMIT TO ME function.
- 6. Direct the recall of an active mission by the use of the Fire Mission command file.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. BCT Job Aids
 - 2. LCU Job Aids
 - 3. MCFSS Version 9.57 SOP
 - 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.09.05 (CORE PLUS) SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given an Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), Battery Computer System (BCS), Battalion Fire Direction Center (FDC) Lightweight Computer Unit (LCU), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, digital communications with an observer, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Supervise the processing of the following special missions in the Fire Support Coordination Center (FSCC) approval mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.
2. Supervise the processing of the following special missions in the CENTRALIZED mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.
3. Supervise the processing of the following special missions in the AUTONOMOUS mode:
 - a. Final Protective Fire (FPF) with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the Final Protective Fire (FPF)/Priority/Known Point.
 - h. Registration missions.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. BCT Job Aids
2. LCU Job Aids
3. MCFSS Version 9.57 SOP
4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

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TASK: 0861.09.06 (CORE PLUS) SUPERVISE THE INPUT AND RETRIEVAL OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given two Single Terminal Command Post (STCP) Lightweight Computer Units (LCUs), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the input of the following Artillery Target Intelligence (ATI) reports:
 - a. Coordinate Report (ATI;CDR).
 - b. Shell Report (ATI;SHR).
 - c. Azimuth Report (ATI;AZR).
 - d. Surveillance Report (ATI;SVL).
 - e. Combat Target Intelligence (ATI;CBTI).
2. Direct the retrieval of targets from target file that may meet more than any one (1) search criteria by the use of the Artillery Target Intelligence (ATI) Search message.
3. Direct the automatic search and retrieval of targets that meet one (1) or more search criteria from an ATI MODE 3 computer by the use of the ATI;QUERRY XMIT TO ME message function.
4. Direct the posting of a Standing Request for Information to an ATI MODE 3 computer, for incoming targets that meet one (1) or more criteria.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

1. BCT Job Aids
 2. LCU Job Aids
 3. MCFSS Version 9.57 SOP
 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.09.07 (CORE PLUS) VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): GiventwoSTCPLCUs, radios, encryptiondevices, MCFSSTab, andthereferences.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Verify the input of the following ATI Modification file messages:
 - a. ATI;SVMOD.
 - b. ATI;FMMOD.
 - c. ATI;TBMOD.
 - d. ATI;DPMOD.
 - e. ATI;STAT.
2. Verify the input of data into the following Artillery Target Intelligence (ATI) Command Target reports:

- a. ATI;TRY.
 - b. ATI;COMB.
 - c. ATI;SPLIT.
3. Direct the printing of ATI MODE 3 target file by the use of the ATI USER COMMAND message.
4. Direct the printing of all Standing Requests for Information posted in the ATI MODE 3 computer by the use of the ATI USER COMMAND messages.
5. Direct the transmission of specific target criteria parameters to another ATI MODE 3 computer by the use of the ATI;CRIT message.
6. Direct the printing of the ATI MOD FILE, Range error and Location error tables.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. BCT Job Aids
 - 2. LCU Job Aids
 - 3. MCFSS Version 9.57 SOP
 - 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)
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TASK: 0861.09.08 (CORE PLUS) DIRECT THE BUILDING AND COMPUTATION OF A NONNUCLEAR FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given two Single Terminal Command Post (STCP) Lightweight Computer Units (LCUs), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references and within 20 minutes.

PERFORMANCE STEPS:

- 1. Verify the building of a Fire Plan MOD file by the use of the NNFP;COMD message.
- 2. Verify the building of a Fire Plan Tactical Database by the use of the Support and AFU Build message.
- 3. Verify the input of targets into the Fire Plan Preliminary Target List (NNFP;FPLST).
- 4. Verify the instruction and movement of targets from the FPLST to the Fire Plan Target List (NNFP;FPTGT) by the use of the NNFP;INSTR message.
- 5. Direct that a particular unit be reserved from firing for a period of the schedule by the use of the NNFP;RESFU message.
- 6. Direct the computation of the Fire Plan by the use of the NNFP;COMFP message.
- 7. Direct the execution of a Fire Plan once H-Hour is established by the use of the NNFP;EXECFP.
- 8. Direct the generation of Fire Commands for review by the use of the NNFP;EXEFCP.
- 9. Direct the transmission of the following Fire Plan target files:
 - a. NNFP;FPLST.
 - b. NNFP;FPTGT.
 - c. NNFP;TISF.
 - d. NNFP;FC.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS Version 9.57 SOP
- 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.09.09 (CORE PLUS) DIRECT THE BUILDING AND COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify the building of a Fire Plan MOD file by the use of the NNFP;COMD message.
- 2. Verify the building of a Fire Plan Tactical Database by the use of the Support and AFU Build message.
- 3. Verify the input of Family of Scatterable Mines (FASCAM) targets into the Fire Plan.
- 4. Direct the computation of the Family of Scatterable Mines (FASCAM) Fire Plan by the use of the NNFP;FASCAM message.
- 5. Verify possible Fire Plan Exceptions.
- 6. Direct the transmission of the Fire Commands to the firing unit.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS Version 9.57 SOP
- 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.09.10 (CORE PLUS) DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given two Single Terminal Command Post (STCP) Lightweight Computer Units (LCUs), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Verify that all required equipment is available for JUMP operations.
- 2. Direct the establishment of voice and digital communication with all required subscribers.
- 3. Assume control of the MAIN, as required and directed.

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS Version 9.57 SOP
- 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

TASK: 0861.09.11 (CORE PLUS) DIRECT THE PREPARATION AND MAINTENANCE OF THE MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) FILE MANAGEMENT SYSTEM WITHIN THE FIRE SUPPORT COORDINATION CENTER (FSCC) WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)

CONDITION(S): Given a Single Terminal Command Post (STCP) Lightweight Computer Unit (LCU), radios, encryption devices, Marine Corps Fire Support System (MCFSS) Tab, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Direct the preparation of the following file folders:
 - a. COMM.
 - b. SUPPORT.
 - c. AFU.
 - d. FM.
 - e. ATI.
 - f. FIRE PLAN.
- 2. Direct the management of Salvage Point Recordings (SPR).

INITIAL TRAINING SETTING: MOJT Sustainment: 3 Req By: Sgt

REFERENCE(S):

- 1. BCT Job Aids
- 2. LCU Job Aids
- 3. MCFSS Version 9.57 SOP
- 4. TM 11-7025-279-10-1, Operation Procedure Guide, (LTACFIRE)

DUTY AREA 10 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) OPERATIONS

TASK: 0861.10.01 (CORE PLUS) ESTABLISH A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a single station Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Configure a single workstation Operational Facility (OPFAC).
- 2. Power a single workstation Operational Facility (OPFAC).
- 3. Login at Defense Infra structure Information Common Operating Environment (DII COE).

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4. Start AFATDS.
5. Restore database.
6. Ensure validity of the unit configuration window.
7. Replace default database.
8. Ensure recognition of communications modems.
9. Edit workstation name (optional).
10. Configure printer.
11. Activate Operational Facility (OPFAC).
12. Load V-MAP (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. DEP 7025-10-1
 2. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 3. MCWP 3-1.6.7, AFATDS TPM
 4. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 5. TB-11-7025-297-10, AFATDS Operators Notebook
 6. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.02 (CORE PLUS) ESTABLISH A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a multi-workstation Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Configure a multi-workstation Operational Facility (OPFAC).
2. Power a multi-workstation Operational Facility (OPFAC).
3. Change machine ID, if required.
4. Login at DII COE.
5. Start AFATDS at master.
6. Enter multi-workstation Operational Facility (OPFAC) name.
7. Start AFATDS at slave(s).
8. Enter the multi-workstation Operational Facility (OPFAC) name at the slaves.
9. Restore database at the master.
10. Ensure the validity of the unit configuration window.
11. Replace default database.
12. Activate master workstation.
13. Configure printer(s).

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- 14. Associate assignments to workstations.
- 15. Load V-Maps (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.03 (CORE PLUS) PERFORM EXIT PROCEDURES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Exit AFATDS at specific workstations within an Operational Facility (OPFAC).
- 2. Exit AFATDS for an entire Operational Facility (OPFAC).
- 3. Exit AFATDS for an Operational Facility (OPFAC) at a specific time.
- 4. Exit a user account.
- 5. Shutdown hardware at an Operational Facility (OPFAC).
- 6. Turn off power.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.04 (CORE PLUS) ENTER A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter configuration name.
- 2. Enter network parameters.
- 3. Enter destination stations.
- 4. Enter routing data.
- 5. Perform functions from the COMM Configuration Menu.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.05 (CORE PLUS) IMPLEMENT A COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC) with a planned communications configuration entered, operations order, and references.

STANDARD(S): Per the references, ensuring message transmission.

PERFORMANCE STEPS:

- 1. Select the planned configuration as NEW CURRENT.
- 2. Associate channels to communication networks.
- 3. Turn on all nets.
- 4. Transmit test messages.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.06 (CORE PLUS) ENTER DISTRIBUTION DATA

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Assign units to distribution lists.
- 2. Enter distribution list criteria.
- 3. Execute distribution list functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.07 (CORE PLUS) INPUT ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) DATABASE UPDATES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, tactical situation, geometry data, meteorological data, logistical data, and the references.

STANDARD(S): Per the references, ensuring currency.

PERFORMANCE STEPS:

1. Enter unit data.
2. Enter geometry.
3. Enter meteorological data.
4. Enter unit logistical data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.08 (CORE PLUS) ENTER TARGET GUIDANCES

CONDITION(S): Given a Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, commander’s guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter target selection standards.
2. Enter high value target list data.
3. Enter Target Management Matrix (TMM) data.
4. Enter mission prioritization data.
5. Enter mission routing data.
6. Enter special target allocation data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.09 (CORE PLUS) ENTER FIRE SUPPORT ATTACK GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Fire Support (FS) attack guidance, and the references.

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STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter air attack methods.
- 2. Enter Naval Surface Fire Support (NSFS) attack methods.
- 3. Enter mortar attack methods.
- 4. Enter mortar restrictions.
- 5. Enter mortar immediate attack methods.
- 6. Enter aviation attack methods.
- 7. Enter system attack perimeters.
- 8. Enter munitions restrictions.
- 9. Enter system task list data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.10 (CORE PLUS) ENTER UNIT AND SENSOR GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Controlled Supply Rate (CSR) guidances.
- 2. Enter reporting guidances.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.11 (CORE PLUS) ENTER FIELD ARTILLERY (FA) ATTACK GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Field Artillery (FA) attack guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Field Artillery (FA) preference table.
- 2. Enter Field Artillery (FA) cannon attack method.
- 3. Enter Field Artillery (FA) restriction.
- 4. Enter Field Artillery (FA) immediate attack method.
- 5. Enter rocket/missile attack methods.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.12 (CORE PLUS) ENTER COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC); operations order; Command, Control, and Communications (C3) guidance; and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter meteorological guidance.
- 2. Enter movement guidance.
- 3. Enter survey guidance.
- 4. Enter Multiple Launch Rocket System (MLRS) guidance.
- 5. Enter FDS guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.13 (CORE PLUS) ENTER MISCELLANEOUS GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, miscellaneous guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Continuous Operations (CONOPS) guidance.
- 2. Enter target decay time guidance.

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- 3. Enter target duplication guidance.
- 4. Enter Fire Support (FS) system buffer distance guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.14 (CORE PLUS) ENTER INTERVENTION POINT DATA

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter mission precedence criteria.
- 2. Enter battle area criteria.
- 3. Enter mission type criteria.
- 4. Enter target type criteria.
- 5. Enter target filter criteria.
- 6. Enter analysis result criteria.
- 7. Enter attack option criteria.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.15 (CORE PLUS) PROCESS TARGET REPORTS

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target block number allocation.
- 2. Perform target file maintenance (target lists, duplicates, coordination).
- 3. Process target indicator data.
- 4. Process suspect target data.
- 5. Initiate a fire mission.

- 6. Perform target process functions (find target, fire target, cancel Record As Target (RAT), End Of Mission (EOM), checkfiring).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.16 (CORE PLUS) PROCESS A FIRE REQUEST

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, fire request, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Perform fire mission file maintenance (active mission monitor, Mission Fired Report (MFR) monitor, active fire mission window, End Of Mission (EOM), Record As Target (RAT).
- 2. Perform munition calculation procedures.
- 3. Reprocess a fire request.
- 4. Process a clearance request.
- 5. Process a coordination request.
- 6. Process fire missions requiring additional information.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.17 (CORE PLUS) ENTER A FIRE SUPPORT PLAN

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter basic plan information.
- 2. Enter friendly situation.
- 3. Enter enemy situation.
- 4. Enter enemy template(s).
- 5. Enter the fire support task organization.

6. Enter an alternate courses of action.
7. Compare courses of action.
8. Select a course of action.
9. Enter enemy units to target list.
10. Compute FA estimate.
11. Compare plans.
12. Enter planning documents.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.18 (CORE PLUS) BUILD A SCHEDULE OF FIRES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, target list, commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter target groups.
2. Enter series.
3. Enter a fire plan.
4. Transmit a fire plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.19 (CORE PLUS) IMPLEMENT A PLANNED SITUATION INTO CURRENT

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, plan, commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Edit unit locations.
2. Edit the fire plan.

- 3. Recompute schedule of fires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.20 (CORE PLUS) ENTER UNIT MOVEMENT INFORMATION

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter movement guidance.
- 2. Enter movement factors.
- 3. Build a movement overlay.
- 4. Establish routes.
- 5. Establish a move.
- 6. Deconflict unit moves.
- 7. Request move approval.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.21 (CORE PLUS) PERFORM CONTINUOUS OPERATIONS (CONOPS)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Continuous Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Continuous Operations (CONOPS) guidance.
- 2. Transmit Continuous Operations (CONOPS) guidance and associated BASIC/General Unit date.
- 3. Enable/disable Mission Fired Report (MFR)/Inactive target purge.
- 4. Update communication configuration.
- 5. Transmit Continuous Operations (CONOPS) notification.

6. Activate backup Operational Facilities (OPFACs).
7. Activate satellite Operational Facilities (OPFACs).
8. Clear principle Operational Facility (OPFAC) mission interventions.
9. Transmit Continuous Operations (CONOPS) ready message.
10. Activate Continuous Operations (CONOPS) guidance.
11. Process Continuous Operations (CONOPS) activation messages.
12. Transmit active target list to backup Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.22 (CORE PLUS) BUILD AN AIR SUPPORT LIST (ASL)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, target list, commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Build an air support list (ASL).
2. Enter start and end times.
3. Name an ASL.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.23 (CORE PLUS) PROCESS AN AIR SUPPORT LIST (ASL)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Plan, TARL and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Make entries in the Air Mission Routing.
2. Merge ASLs.
3. Sort ASRs in an ASL.

- 4. Customize an ASL.
- 5. Disseminate an ASL.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.24 (CORE PLUS) TAKE ACTION UPON RECEIPT OF AN AIR TASKING ORDER (ATO)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Air Tasking Order (ATO), commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. View Air Tasking Order (ATO).
- 2. View denied ASL.
- 3. View approved ASL.
- 4. View the current ASL.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.10.25 (CORE PLUS) TAKE ACTION UPON RECEIPT OF AN AIRSPACE COORDINATION ORDER (ACO)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Airspace Coordination Order (ACO), commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. View Airspace Coordination Order (ACO).
- 2. View geometries.
- 3. Build data distribution.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

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- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.26 (CORE PLUS) PROCESS AN IMMEDIATE AIR SUPPORT REQUEST (ASR)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Air Mission, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Process an air mission.
- 2. Setup to divert.
- 3. Transmit the FR.
- 4. Setup the update.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.27 (CORE PLUS) CREATE A TRIGGER EVENT

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), Operations Order, commander’s guidance, a tripped trigger event, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Establish a trigger event rule.
- 2. Establish the trigger function.
- 3. Establish the trigger event state.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.10.28 (CORE PLUS) TAKE ACTIONS UPON A TRIGGERED EVENT BEING TRIPPED

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), Operations Order, commander’s guidance, a tripped trigger event, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Direct the implementation of the prescribed actions.
- 2. Direct the actions on automatically generated functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Pvt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

DUTY AREA 11 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) SUPERVISOR

TASK: 0861.11.01 (CORE PLUS) DIRECT THE ESTABLISHMENT OF A SINGLE WORKSTATION OPERATIONAL FACILITY (OPFAC)

CONDITION(S): Given equipment for a single station Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Configure a single workstation Operational Facility (OPFAC).
- 2. Power a single workstation Operational Facility (OPFAC).
- 3. Login at Defense Infrastructure Information Common Operating Environment (DII COE).
- 4. Start Advanced Field Artillery Tactical Data System (AFATDS).
- 5. Restore database.
- 6. Ensure validity of unit configuration window.
- 7. Replace default database.
- 8. Activate Operational Facility (OPFAC).
- 9. Configure printer.
- 10. Load V-MAP (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.02 (CORE PLUS) DIRECT THE ESTABLISHMENT OF A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)

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CONDITION(S): Given equipment for a multi-workstation Operational Facility (OPFAC), power source, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Configure a multi-workstation Operational Facility (OPFAC).
2. Power a multi-workstation Operational Facility (OPFAC).
3. Change machine ID, if required.
4. Login at Defense Infrastructure Information Common Operating Environment (DII COE).
5. Start Advanced Field Artillery Tactical Data System (AFATDS) at master.
6. Enter multi-workstation Operational Facility (OPFAC) name.
7. Start Advanced Field Artillery Tactical Data System (AFATDS) at slave(s).
8. Enter multi-workstation Operational Facility (OPFAC) name at slave(s).
9. Restore database at the master.
10. Ensure validity of unit configuration window.
11. Replace default database.
12. Activate master workstation.
13. Configure printer(s).
14. Associate assignments to workstations.
15. Load V-Maps (optional).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.03 (CORE PLUS) DIRECT EXIT PROCEDURES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Exit Advanced Field Artillery Tactical Data System (AFATDS) at specific workstations within an Operational Facility (OPFAC).
2. Exit Advanced Field Artillery Tactical Data System (AFATDS) for an entire Operational Facility (OPFAC).
3. Exit Advanced Field Artillery Tactical Data System (AFATDS) for an Operational Facility (OPFAC) at a specific time.
4. Exit a user account.

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- 5. Shutdown hardware at an Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.04 (CORE PLUS) PLAN A COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Determine required connectivity.
- 2. Determine the required networks.
- 3. Check the routes, based on device limitations, and assign net setting parameters.
- 4. Check fire mission routes.
- 5. Assign addresses.
- 6. Build the enclosure to TAB J.
- 7. Determine the protocols to be used.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.05 (CORE PLUS) PLAN A DATA DISTRIBUTION SCHEME

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Decide what information is required.
- 2. Determine the routes for information.
- 3. Using the routes, determine what lists must exist.
- 4. Using the routes and lists, determine what criteria must exist.
- 5. Compare the requirements to the default data distribution.

6. Build additional lists to provide required distribution.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.06 (CORE PLUS) SUPERVISE THE ENTRY OF A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, subscriber tables, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter configuration name.
- 2. Enter network parameters.
- 3. Enter destination stations.
- 4. Enter routing data.
- 5. Perform functions from the COMM Configuration Menu.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.07 (CORE PLUS) SUPERVISE THE IMPLEMENTATION OF A PLANNED COMMUNICATIONS CONFIGURATION

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC) with a planned communications configuration entered, operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Select the planned configuration as NEW CURRENT.
- 2. Associate channels to communication networks.
- 3. Turn on all nets.
- 4. Transmit test messages.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.08 (CORE PLUS) SUPERVISE THE ENTRY OF THE DISTRIBUTION DATA

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Assign units to distribution lists.
- 2. Enter distribution list criteria.
- 3. Execute distribution list functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.09 (CORE PLUS) SUPERVISE ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) DATABASE INPUT

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, tactical situation, geometry data, meteorological data, logistical data, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter unit data.
- 2. Enter geometry.
- 3. Enter meteorological data.
- 4. Enter unit logistical data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.10 (CORE PLUS) ESTABLISH TARGET GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, commander’s guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target selection standards.
- 2. Enter High Value Target (HVT) list data.
- 3. Enter Target Management Matrix (TMM) data.
- 4. Enter mission prioritization data.
- 5. Enter mission routing data.
- 6. Enter special target allocation data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.11 (CORE PLUS) ESTABLISH FIRE SUPPORT (FS) ATTACK GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Fire Support (FS) attack guidance, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter air attack methods.
- 2. Enter Naval Surface Fire Support (NSFS) attack methods.
- 3. Enter mortar attack methods.
- 4. Enter mortar restrictions.
- 5. Enter mortar immediate attack methods.
- 6. Enter aviation attack methods.
- 7. Enter system attack perimeters.
- 8. Enter munitions restrictions.
- 9. Enter system tasks list data.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

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- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.12 (CORE PLUS) ESTABLISH UNIT AND SENSOR GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Controlled Supply Rate (CSR) guidances.
- 2. Enter reporting guidances.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.13 (CORE PLUS) ESTABLISH FIELD ARTILLERY (FA) ATTACK GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Field Artillery (FA) attack guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Field Artillery (FA) preference table.
- 2. Enter Field Artillery (FA) cannon attack method.
- 3. Enter Field Artillery (FA) restriction.
- 4. Enter Field Artillery (FA) immediate attack method.
- 5. Enter rocket/missile attack methods.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.14 (CORE PLUS) ESTABLISH COMMAND, CONTROL, AND COMMUNICATIONS (C3) GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, C3 guidance, and references.

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STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter meteorological guidance.
- 2. Enter movement guidance.
- 3. Enter survey guidance.
- 4. Enter Multiple Launch Rocket System (MLRS) guidance.
- 5. Enter FDS guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.15 (CORE PLUS) ESTABLISH MISCELLANEOUS GUIDANCES

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, miscellaneous guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter Continuity of Operations (CONOPS) guidance.
- 2. Enter target decay time guidance.
- 3. Enter target duplication guidance.
- 4. Enter Fire Support (FS) system buffer distance guidance.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.16 (CORE PLUS) DIRECT ESTABLISHMENT OF INTERVENTION POINT DATA

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter mission precedence criteria.
- 2. Enter battle area criteria.
- 3. Enter mission type criteria.

- 4. Enter target type criteria.
- 5. Enter target filter criteria.
- 6. Enter analysis result criteria.
- 7. Enter attack option criteria.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.17 (CORE PLUS) SUPERVISE TARGET REPORT PROCESSING

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target block number allocation.
- 2. Perform target file maintenance (target lists, duplicates, coordination).
- 3. Process target indicator data.
- 4. Process suspect target data.
- 5. Initiate a fire mission.
- 6. Perform target process functions (find target, fire target, cancel Record As Target (RAT), End Of Mission (EOM), checkfiring).
- 7. Enter ASR number block.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.18 (CORE PLUS) SUPERVISE FIRE REQUEST PROCESSING

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, fire request, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Perform fire mission file maintenance (active mission monitor, MFR monitor, active fire mission window, End Of Mission (EOM), Record As Target (RAT)).
- 2. Perform munition calculation procedures.

3. Reprocess a fire request.
4. Process a clearance request.
5. Process a coordination request.
6. Direct processing of missions requiring additional information.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.19 (CORE PLUS) DEVELOP A FIRE SUPPORT PLAN

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter basic plan information.
2. Enter friendly situation.
3. Enter enemy situation.
4. Enter enemy template(s).
5. Enter the fire support task organization.
6. Enter alternate courses of action.
7. Compare courses of action.
8. Select a course of action.
9. Enter enemy units to target list.
10. Compute FA estimate.
11. Compare plans.
12. Enter planning documents.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.20 (CORE PLUS) DEVELOP A SCHEDULE OF FIRES

CONDITION(S): Given a AFATDS OPFAC, operations order, target list, commander's guidance, and references.

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ENCLOSURE (3)

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter target groups.
- 2. Enter series.
- 3. Enter a fire plan.
- 4. Transmit a fire plan.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.21 (CORE PLUS) SUPERVISE THE IMPLEMENTATION OF A PLANNED SITUATION INTO CURRENT

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, plan, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Edit unit locations.
- 2. Edit the fire plan.
- 3. Recompute schedule of fires.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.22 (CORE PLUS) PLAN UNIT MOVEMENT

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Enter movement guidance.
- 2. Enter movement factors.
- 3. Build a movement overlay.

4. Establish routes.
5. Establish a move.
6. Deconflict unit moves.
7. Request move approval.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.23 (CORE PLUS) PLAN CONTINUITY OF OPERATIONS (CONOPS)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Continuity of Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter Continuity of Operations (CONOPS) guidance.
2. Transmit Continuity of Operations (CONOPS) guidance and associated BASIC/General Unit data.
3. Enable/disable MFR/Inactive target purge.
4. Update communication configuration.
5. Transmit Continuity of Operations (CONOPS) notification.
6. Activate backup Operational Facilities (OPFACs).
7. Activate satellite Operational Facilities (OPFACs).
8. Clear principle Operational Facility (OPFAC) mission interventions.
9. Transmit Continuity of Operations (CONOPS) ready message.
10. Activate Continuity of Operations (CONOPS) guidance.
11. Process Continuity of Operations (CONOPS) activation messages.
12. Transmit active target list to backup Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.24 (CORE PLUS) SUPERVISE CONTINUITY OF OPERATIONS (CONOPS) EXECUTION

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Continuity of Operations (CONOPS) guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Enter Continuity of Operations (CONOPS) guidance.
2. Transmit Continuity of Operations (CONOPS) guidance and associated BASIC/General Unit data.
3. Enable/disable MFR/Inactive target purge.
4. Update communication configuration.
5. Transmit Continuity of Operations (CONOPS) notification.
6. Activate backup Operational Facilities (OPFACs).
7. Activate satellite Operational Facilities (OPFACs).
8. Clear principle Operational Facility (OPFAC) mission interventions.
9. Transmit Continuity of Operations (CONOPS) ready message.
10. Activate Continuity of Operations (CONOPS) guidance.
11. Process Continuity of Operations (CONOPS) activation messages.
12. Transmit active target list to backup Operational Facility (OPFAC).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.25 (CORE PLUS) SUPERVISE THE DEVELOPMENT OF AN AIR SUPPORT LIST (ASL)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, target list, commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Build an Air Support List (ASL).
2. Enter start and end times.
3. Name the Air Support List (ASL).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)

2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.26 (CORE PLUS) SUPERVISE THE PROCESSING OF THE AIR SUPPORT LIST (ASL)

CONDITION(S): Given a AFATDS Operational Facility (OPFAC), Air Support List (ASL), commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Make entries in air mission routing.
2. Customize the Air Support List (ASL).
3. Merge Air Support Lists (ASLs).
4. Sort ASRs in Air Support List (ASL).
5. Disseminate an Air Support List (ASL).
6. Create ASRs.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.27 (CORE PLUS) SUPERVISE ACTIONS UPON RECEIPT OF AN AIR TASKING ORDER (ATO)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Air Tasking Order (ATO), commander's guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. View Air Tasking Order (ATO).
2. View denied ASL.
3. View approved ASL.
4. View the current ASL.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.28 (CORE PLUS) SUPERVISE ACTION ON RECEIPT OF AN AIRSPACE COORDINATION ORDER (ACO)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, Airspace Coordination Order (ACO), commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. View Airspace Coordination Order (ACO).
- 2. View geometries.
- 3. Build data distribution.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.29 (CORE PLUS) DIRECT A REQUEST FOR IMMEDIATE CLOSE AIR SUPPORT (CAS)

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, air mission, commander’s guidance, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Process an air mission.
- 2. Direct setup for divert.
- 3. Direct setup for update.
- 4. Transmit an Fire Request (FR).

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

TASK: 0861.11.30 (CORE PLUS) DIRECT THE CREATION OF A TRIGGER EVENT

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, commander’s guidance, a tripped trigger event, and the references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Direct the establishment of a trigger event rule.
- 2. Direct the establishment of a trigger function.
- 3. Direct the establishment of a trigger event state.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
 - 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
 - 3. TB-11-7025-297-10, AFATDS Operators Notebook
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TASK: 0861.11.31 (CORE PLUS) DIRECT ACTIONS FOR A TRIPPED TRIGGER EVENT

CONDITION(S): Given an operational Advanced Field Artillery Tactical Data System (AFATDS) Operational Facility (OPFAC), operations order, commander's guidance, a tripped trigger event, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

- 1. Direct the implementation of the prescribed actions.
- 2. Direct the actions on automatically generated functions.

INITIAL TRAINING SETTING: FLC Sustainment: 2 Req By: Sgt

REFERENCE(S):

- 1. MCTM 7025-10/1&2&3&4, Advanced Field Artillery Tactical Data System (AFATDS) Operational System Software (Vol. 1-4)
- 2. MCWP 3-16.2A, Advanced Field Artillery Tactical Data System Tactics, Techniques, and Procedures (AFATDS TTPs)
- 3. TB-11-7025-297-10, AFATDS Operators Notebook

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Annex X to
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3-XF-132

SUMMARY/INDEX OF INDIVIDUAL TRAINING STANDARDS BY SPECIFIC CATEGORY (MOJT, DL, PST)

1. This enclosure summarizes the Individual Training Standards (ITS) according to three categories:
- Annex I: ITSs Trained via Managed On-The-Job Training (MOJT)
- Annex II: ITSs Supported by Distance Learning (DL) Products
- Annex III: ITSs Supported by Performance Support Tools (PST)
2. If no information is applicable to a category, the appendix will include a statement to that effect.
3. Format. The columns in each appendix are as follows:
- a. SEQ. Sequence Number. This number dictates the order in which tasks for a given duty area are displayed.
- b. TASK. ITS Designator. This is the permanent designator assigned to the task when it is created.
- c. TITLE. ITS Task Title.
- d. CORE. An "X" appears in this column when the task is designated as a "core" task required to "make" a Marine or qualify that Marine for the appropriate MOS. The absence of an "X" indicates that this is an advanced ("core plus") task that is mission, grade, or billet specific.
- e. FLC. Functional Learning Center. An "X" appears in this column when the FLC is designated as the initial training setting. The absence of an "X" indicates that the initial training is accomplished through Managed On-The-Job Training (MOJT).
- f. DL. Distance Learning (DL) Product. An "X" in this column indicates that at least one DL product is associated with this task. Consult enclosure (6) for details.
- g. PST. Performance Support Tool (PST). An "X" in this column indicates that at least one PST is associated with this task. Consult enclosure (6) for details.
- h. SUS. Sustainment Training Period. An entry in this column represents the number of months between evaluation or retraining by the unit to maintain the proficiency required by the standard, provided the task supports the unit's METL.
- i. REQ BY. Required By. An entry in this column depicts the lowest grade required to demonstrate proficiency in this task.
- j. PAGE. Page Number. This column lists the number of the page in enclosure (6) that contains detailed information concerning this task.

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INDIVIDUAL TRAINING STANDARDS TRAINED VIA MANAGED ON-THE-JOB TRAINING

This appendix includes a summary listing of all ITS tasks planned for initial Managed On-The-Job Training (MOJT). They are grouped by MOS and Duty Area.

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
MOS 0802, FIELD ARTILLERY OFFICER										
DUTY AREA 01 - OBSERVED FIRE										
2)	0802.01.02	SUPERVISE AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) EQUIPPED OBSERVATION POST						2	2ndLt	3-IF-2
5)	0802.01.05	PREPARE A VISIBILITY DIAGRAM			X			2	2ndLt	3-IF-4
11)	0802.01.11	CONDUCT FIRE MISSIONS WITH THE AN/GVS-5 LASER RANGE FINDER						2	2ndLt	3-IF-7
18)	0802.01.18	CONDUCT A FASCAM MISSION			X			2	2ndLt	3-IF-12
19)	0802.01.19	CONDUCT A DPICM MISSION			X			2	2ndLt	3-IF-13
21)	0802.01.21	CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY						2	2ndLt	3-IF-14
22)	0802.01.22	ADJUST FINAL PROTECTIVE FIRES			X			2	2ndLt	3-IF-15
25)	0802.01.25	CONDUCT A DESTRUCTION MISSION						2	2ndLt	3-IF-18
30)	0802.01.30	CONDUCT A MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)						2	2ndLt	3-IF-22
31)	0802.01.31	ADJUST NAVAL GUNFIRE (NGF)			X			6	2ndLt	3-IF-22
32)	0802.01.32	CONDUCT FIRE MISSION ON IRREGULARLY SHAPED TARGETS						2	2ndLt	3-IF-23
33)	0802.01.33	CONDUCT A COPPERHEAD MISSION						2	2ndLt	3-IF-24
34)	0802.01.34	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE			X		X	2	2ndLt	3-IF-24
DUTY AREA 02 - FIRE DIRECTION										
12)	0802.02.12	SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS						2	2ndLt	3-IF-32
DUTY AREA 03 - CANNON										
11)	0802.03.11	OPERATE THE M94 MVS						2	2ndLt	3-IF-40
12)	0802.03.12	SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT						2	2ndLt	3-IF-41
18)	0802.03.18	PERFORM CRATER ANALYSIS			X			6	2ndLt	3-IF-44
19)	0802.03.19	PERFORM SHELL FRAGMENT ANALYSIS			X			6	2ndLt	3-IF-44
20)	0802.03.20	LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY					X	2	2ndLt	3-IF-45
21)	0802.03.21	VERIFY THE UNIT COMMANDER'S RECORD (NAVMC 10558A)			X			2	2ndLt	3-IF-46
22)	0802.03.22	SUPERVISE AMMUNITION MANAGEMENT ON THE GUN LINE						2	2ndLt	3-IF-46
DUTY AREA 04 - FIRE SUPPORT										
8)	0802.04.08	SUPERVISE THE OPERATIONS OF A FIRE SUPPORT COORDINATION CENTER (FSCC)						2	1stLt	3-IF-51
9)	0802.04.09	PREPARE A TARGET BULLETIN (TARBUL)						2	1stLt	3-IF-53
10)	0802.04.10	PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST					X	2	1stLt	3-IF-53
13)	0802.04.13	COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION					X	2	1stLt	3-IF-55
DUTY AREA 05 - UNIT OPERATIONS										
2)	0802.05.02	DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT			X			2	2ndLt	3-IF-58
7)	0802.05.07	SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING			X			2	2ndLt	3-IF-61
8)	0802.05.08	SUPERVISE THE OPERATIONS OF A SURVEY SECTION			X		X	2	Capt	3-IF-62

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SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 06 - COMMUNICATIONS										
3)	0802.06.03	CONSTRUCT AND REPAIR FIELD EXPEDIENT ANTENNA		X		2	2ndLt	3-IF-64		
DUTY AREA 08 - MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS)										
1)	0802.08.01	BRIEF A MANEUVER COMMANDER ON AUTOMATED SYSTEM CAPABILITIES, LIMITATIONS, AND INTEROPERABILITY CHARACTERISTICS				2	1stLt	3-IF-68		
2)	0802.08.02	BRIEF A MANEUVER COMMANDER ON STANDARD MCFSS NET ARCHITECTURE				2	1stLt	3-IF-69		
3)	0802.08.03	PLAN THE ALLOCATION OF AUTOMATED SUPPORT PARAMETERS				2	1stLt	3-IF-70		
4)	0802.08.04	BRIEF A MANEUVER COMMANDER ON A MCFSS SITUATION REPORT AND ASSOCIATED AFU DATA				2	1stLt	3-IF-70		
5)	0802.08.05	DEVELOP THE AUTOMATED SYSTEM SOFTWARE SETTINGS AS PART OF A MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN				2	1stLt	3-IF-71		
6)	0802.08.06	BRIEF A MANEUVER COMMANDER ON THE COMMANDER'S CRITERIA PORTION OF THE MCFSS ENCLOSURE TO THE ARTILLERY FIRES PLAN				2	1stLt	3-IF-71		
DUTY AREA 11 - LOGISTICS/SUPPLY/COMBAT SERVICE SUPPORT										
1)	0802.11.01	COORDINATE LOGISTICS		X		2	2ndLt	3-IF-90		
2)	0802.11.02	MAINTAIN CLASS V SMALL-ARMS AMMO BASIC LOAD AND SUPPLIES				2	2ndLt	3-IF-91		
3)	0802.11.03	SUPERVISE THE PICKUP AND DELIVERY OF DESIGNATED CLASSES OF SUPPLY				2	2ndLt	3-IF-91		
DUTY AREA 12 - NBC DEFENSE OPERATIONS										
1)	0802.12.01	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA		X	X	6	2ndLt	3-IF-91		
2)	0802.12.02	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT		X	X	6	2ndLt	3-IF-92		
3)	0802.12.03	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT		X	X	6	2ndLt	3-IF-93		
4)	0802.12.04	SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR NUCLEAR ATTACK		X		6	2ndLt	3-IF-94		
DUTY AREA 13 - EMBARKATION										
1)	0802.13.01	SUPERVISE EMBARKATION		X		6	2ndLt	3-IF-95		
DUTY AREA 15 - TARGET AQUISITION/METEOROLOGICAL										
2)	0802.15.02	SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS				3	Capt	3-IF-101		
3)	0802.15.03	SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS				3	Capt	3-IF-102		
4)	0802.15.04	SUPERVISE ACQUIRING AND RECORDING GROUND MET DATA				3	Capt	3-IF-103		

MOS 0803, SURVEY, METEOROLOGICAL, AND RADAR OFFICER

There are no MOJT tasks assigned to any duty areas within this MOS.

MOS 0811, FIELD ARTILLERY CANNONEER

DUTY AREA 01 - CANNONEER										
1)	0811.01.01	MOUNT/DISMOUNT A MACHINEGUN ON A 5-TON TRUCK		X		2	Pvt	3-IIIF-1		

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0811.01.02	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED			X	X	2	Pvt		3-IIIF-1
DUTY AREA 02 - GUNNER/ASSISTANT GUNNER										
1)	0811.02.01	DESTROY A HOWITZER			X		6	Cpl		3-IIIF-17
2)	0811.02.02	TEST THE GUNNER'S QUADRANT			X		3	Sgt		3-IIIF-17
3)	0811.02.03	LAY FOR QUADRANT, USING THE GUNNER'S QUADRANT			X		2	Sgt		3-IIIF-17
4)	0811.02.04	MEASURE THE QUADRANT, USING THE GUNNER'S QUADRANT			X		2	Sgt		3-IIIF-17
5)	0811.02.05	LAY A HOWITZER BY RECIPROCAL LAY, USING M100-SERIES SIGHT			X	X	2	Sgt		3-IIIF-17
6)	0811.02.06	PREPARE A GUNNER'S REFERENCE CARD			X		2	Sgt		3-IIIF-19
7)	0811.02.07	PROCESS A FIRE MISSION WITH THE SECTION CHIEF'S ASSEMBLY (SCA) OF THE GUN DISPLAY UNIT (GDU)					2	Cpl		3-IIIF-20
8)	0811.02.08	PROCESS "CONTINUOUS FIRE", "FINAL PROTECTIVE FIRE", AND "SPECIAL INSTRUCTIONS" AND FIRE MISSION UPDATES WITH THE SECTION CHIEF'S ASSEMBLY (SCA) OF THE GUN DISPLAY UNIT (GDU)					2	Cpl		3-IIIF-20
9)	0811.02.09	TROUBLESHOOT THE GUN DISPLAY UNIT (GDU)					2	Cpl		3-IIIF-21
10)	0811.02.12	OPERATE THE MUZZLE VELOCITY SYSTEM (MVS)			X		2	Cpl		3-IIIF-21
11)	0811.02.13	LEAD A REACTION FORCE			X		2	Cpl		3-IIIF-22
12)	0811.02.14	ALIGN AIMING POSTS, USING M100-SERIES SIGHT			X		2	Sgt		3-IIIF-22
13)	0811.02.15	ALIGN COLLIMATOR, USING M100-SERIES SIGHT			X		2	Sgt		3-IIIF-23
14)	0811.02.16	LAY A HOWITZER FOR DEFLECTION, USING M100-SERIES SIGHT			X	X	2	Sgt		3-IIIF-23
15)	0811.02.17	REFER THE PIECE			X	X	2	Sgt		3-IIIF-24
16)	0811.02.18	REPORT THE CORRECT DEFLECTION			X	X	2	Sgt		3-IIIF-25
17)	0811.02.19	LAY THE M198 HOWITZER FOR INITIAL DIRECTION OF FIRE			X	X	2	Sgt		3-IIIF-25
18)	0811.02.20	CONDUCT DIRECT FIRE WITH THE M100-SERIES PANORAMIC TELESCOPE (M137)			X		2	Sgt		3-IIIF-26
19)	0811.02.21	BORESIGHT WITH THE AIMING CIRCLE			X		2	Sgt		3-IIIF-27
20)	0811.02.22	PREPARE A RANGE CARD FOR A HOWITZER			X		2	Sgt		3-IIIF-28
21)	0811.02.23	SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT			X		2	Sgt		3-IIIF-28
22)	0811.02.24	MEASURE BORESIGHT ERROR			X		2	Sgt		3-IIIF-29
23)	0811.02.25	BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)			X		2	Cpl		3-IIIF-29
24)	0811.02.26	LAY THE HOWITZER FOR QUADRANT, USING THE M18 OR M17 FIRE CONTROL QUADRANT			X		2	Cpl		3-IIIF-30
25)	0811.02.27	MEASURE THE QUADRANT, USING THE M17 OR M18 FIRE CONTROL QUADRANT			X		2	Cpl		3-IIIF-30
26)	0811.02.28	SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE			X		2	Cpl		3-IIIF-31
27)	0811.02.29	LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP)			X	X	2	Cpl		3-IIIF-31
28)	0811.02.30	CHECK BORESIGHT OF THE PANORAMIC TELESCOPE, USING THE ALIGNMENT DEVICE			X		2	Sgt		3-IIIF-32
29)	0811.02.31	ADJUST THE EQUILIBRATORS			X		3	Cpl		3-IIIF-32
30)	0811.02.32	PERFORM FIRE CONTROL ALIGNMENT TESTS			X		3	Sgt		3-IIIF-33
31)	0811.02.33	TROUBLESHOOT COMMON MALFUNCTIONS					3	Cpl		3-IIIF-33
32)	0811.02.34	BORE SIGHT THE M137 PANORAMIC TELESCOPE USING A DISTANT AIMING POINT (DAP)			X		2	Sgt		3-IIIF-34
DUTY AREA 03 - SECTION CHIEF										
1)	0811.03.01	PREPARE A HOWITZER FOR FIRING			X		2	SSgt		3-IIIF-34
2)	0811.03.02	MEASURE THE ANGLE OF SITE TO CREST AND THE PIECE TO CREST RANGE			X		2	SSgt		3-IIIF-35
3)	0811.03.04	DETERMINE WHETHER A HOWITZER IS SAFE TO FIRE			X		2	SSgt		3-IIIF-36

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
4)	0811.03.05	COMPUTE DATA FOR SWEEP AND ZONE FIRE MISSION			X		6	SSgt		3-IIIF-37
5)	0811.03.06	ISSUE FIRE COMMAND FOR DIRECT FIRE MISSION			X		2	SSgt		3-IIIF-37
6)	0811.03.07	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON A 5-TON TRUCK			X		1	SSgt		3-IIIF-38
7)	0811.03.10	PREPARE A HOWITZER SECTION FOR HELICOPTER DISPLACEMENT			X		6	SSgt		3-IIIF-39
8)	0811.03.12	SUPERVISE DIRECT FIRE, USING THE TWO-MAN TWO-SIGHT TECHNIQUE (M198)			X		6	SSgt		3-IIIF-39
9)	0811.03.14	SUPERVISE DIRECT FIRE, USING THE ONE-MAN ONE-SIGHT TECHNIQUE			X		6	SSgt		3-IIIF-39
10)	0811.03.15	PREPARE A HOWITZER FOR TRAVEL			X		2	SSgt		3-IIIF-41
11)	0811.03.16	PREPARE A HOWITZER TO SHOOT OUT OF NORMAL TRAVERSE LIMITS			X		2	SSgt		3-IIIF-41
12)	0811.03.17	SUPERVISE THE PREPARATION OF A PROJECTILE FOR FIRING			X		2	SSgt		3-IIIF-42
13)	0811.03.18	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE HOWITZER			X		1	SSgt		3-IIIF-42
14)	0811.03.19	VERIFY FIRE CONTROL ALIGNMENT TESTS			X		3	SSgt		3-IIIF-43
15)	0811.03.20	VERIFY MAINTENANCE ON THE BREECH MECHANISM AND THE COUNTERBALANCE			X		3	SSgt		3-IIIF-43
16)	0811.03.21	PREPARE THE HOWITZER FOR EXTERNAL HELICOPTER LIFT			X		6	SSgt		3-IIIF-44
DUTY AREA 04 - PLATOON SERGEANT/LOCAL SECURITY CHIEF										
1)	0811.04.01	CONDUCT BATTERY CREW SERVED WEAPONS TRAINING			X		2	SSgt		3-IIIF-44
2)	0811.04.02	SET UP AND RECOVER THE M2A2 AIMING CIRCLE					2	SSgt		3-IIIF-45
3)	0811.04.03	LAY THE FIRING BATTERY				X	2	SSgt		3-IIIF-46
4)	0811.04.04	MEASURE THE ORIENTING ANGLE (OA)				X	2	SSgt		3-IIIF-46
5)	0811.04.05	MEASURE THE AZIMUTH OF THE LINE OF FIRE				X	2	SSgt		3-IIIF-47
6)	0811.04.06	COMPUTE MINIMUM QUADRANT ELEVATION (MIN QE)					2	SSgt		3-IIIF-48
7)	0811.04.07	MEASURE DISTANCE, USING THE SUBTENSE METHOD					2	SSgt		3-IIIF-48
8)	0811.04.08	DECLINATE THE AIMING CIRCLE					2	SSgt		3-IIIF-49
9)	0811.04.09	DECLINATE THE M2 COMPASS					2	SSgt		3-IIIF-50
10)	0811.04.10	MEASURE THE VERTICAL ANGLE (VA)					2	SSgt		3-IIIF-50
11)	0811.04.11	MAINTAIN THE M2A2 AIMING CIRCLE					2	SSgt		3-IIIF-51
12)	0811.04.12	CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION			X	X	2	SSgt		3-IIIF-51
13)	0811.04.13	PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS			X		6	SSgt		3-IIIF-53
14)	0811.04.14	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS			X		6	SSgt		3-IIIF-54
15)	0811.04.15	PERFORM SHELL FRAGMENT ANALYSIS			X		6	SSgt		3-IIIF-55
16)	0811.04.16	ESTABLISH AN ADVANCE PARTY			X		2	SSgt		3-IIIF-55
17)	0811.04.17	PLAN THE DEFENSE OF A FIELD ARTILLERY UNIT			X		2	SSgt		3-IIIF-56
DUTY AREA 05 - BATTERY GUNNERY SERGEANT										
1)	0811.05.01	EMPLOY THE HASTY SURVEY TECHNIQUES FOR DIRECTIONAL AND POSITIONAL CONTROL			X	X	2	GySgt		3-IIIF-57
2)	0811.05.02	PREPARE THE EXECUTIVE OFFICER'S (XO'S) REPORT					2	GySgt		3-IIIF-58
3)	0811.05.03	DISPOSE OF UNUSED POWDER INCREMENTS					2	GySgt		3-IIIF-58
4)	0811.05.04	LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY				X	2	GySgt		3-IIIF-59
5)	0811.05.05	UPDATE UNIT COMMANDER'S RECORD (NAVMC 10558A)			X		2	GySgt		3-IIIF-60
6)	0811.05.06	DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT			X		2	GySgt		3-IIIF-60
7)	0811.05.07	SUPERVISE A BATTERY DISPLACEMENT			X		2	GySgt		3-IIIF-61
8)	0811.05.08	SUPERVISE A TACTICAL ROAD MARCH			X	X	2	GySgt		3-IIIF-62

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
9)	0811.05.09	DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT			X		2	GySgt		3-IIIF-63
10)	0811.05.10	COORDINATE LOGISTICS			X		2	GySgt		3-IIIF-64
11)	0811.05.11	MAINTAIN CLASS V SMALL-ARMS AMMO BASIC LOAD AND SUPPLIES					2	GySgt		3-IIIF-64
12)	0811.05.12	SUPERVISE THE PICKUP AND DELIVERY OF DESIGNATED CLASSES OF SUPPLY					2	GySgt		3-IIIF-65
13)	0811.05.13	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA			X	X	6	GySgt		3-IIIF-65
14)	0811.05.14	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	GySgt		3-IIIF-66
15)	0811.05.15	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	GySgt		3-IIIF-67
16)	0811.05.16	SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR A NUCLEAR ATTACK			X	X	6	GySgt		3-IIIF-68
17)	0811.05.17	SUPERVISE EMBARKATION			X		6	GySgt		3-IIIF-69
18)	0811.05.18	SUPERVISE AMMUNITION MANAGEMENT ON THE GUN LINE					2	GySgt		3-IIIF-70
19)	0811.05.19	DIRECT SUSTAINMENT AND/OR SKILL PROGRESSION TRAINING FOR THE BATTERY			X	X	1	GySgt		3-IIIF-70
20)	0811.05.20	ASSIST IN TRAINING PLAN DEVELOPMENT AND IMPLEMENTATION					1	GySgt		3-IIIF-72
21)	0811.05.21	SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING			X		2	GySgt		3-IIIF-73
DUTY AREA 06 - M101A1 HOWITZER										
1)	0811.06.01	BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)					2	Cpl		3-IIIF-73
2)	0811.06.02	BORESIGHTING THE DIRECT FIRE ELBOW TELESCOPE, USING A TESTING TARGET					2	LCpl		3-IIIF-74
3)	0811.06.03	LAY THE HOWITZER FOR QUADRANT, USING THE FIRE CONTROL QUADRANT					2	LCpl		3-IIIF-74
4)	0811.06.04	MEASURE THE QUADRANT, USING THE FIRE CONTROL QUADRANT					2	LCpl		3-IIIF-75
5)	0811.06.05	SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE					2	LCpl		3-IIIF-75
6)	0811.06.06	DISASSEMBLE AND ASSEMBLE THE BREECHLOCK					2	Pvt		3-IIIF-75
7)	0811.06.07	DISASSEMBLE AND ASSEMBLE THE FIRING LOCK					2	Pvt		3-IIIF-76
8)	0811.06.08	LOAD AND FIRE A PREPARED ROUND					2	Pvt		3-IIIF-76
9)	0811.06.09	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE M101A1 HOWITZER			X		2	Pvt		3-IIIF-77
10)	0811.06.10	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)			X		2	Cpl		3-IIIF-78
11)	0811.06.11	PERFORM PREFIRE CHECKS					2	Pvt		3-IIIF-78
12)	0811.06.12	PERFORM FIRE CONTROL ALIGNMENT TESTS					3	LCpl		3-IIIF-79
13)	0811.06.13	VERIFY FIRE CONTROL ALIGNMENT TESTS					3	Sgt		3-IIIF-79
14)	0811.06.14	TAKE IMMEDIATE ACTION FOR MISFIRE					2	Pvt		3-IIIF-80
15)	0811.06.15	ADJUST THE EQUILIBRATOR					3	LCpl		3-IIIF-80
16)	0811.06.16	TROUBLESHOOT COMMON MALFUNCTIONS OF THE HOWITZER					2	LCpl		3-IIIF-80
17)	0811.06.17	PREPARE THE HOWITZER AND AMMUNITION FOR EXTERNAL LOAD					6	Cpl		3-IIIF-81
18)	0811.06.18	ESTABLISH A STANDARD ANGLE					3	LCpl		3-IIIF-81
19)	0811.06.19	VERIFY BORESIGHT, USING THE STANDARD ANGLE METHOD					2	LCpl		3-IIIF-81
20)	0811.06.20	EMPLOY DEFLECTION BOARD IN ASSAULT FIRE PROCEDURES					2	LCpl		3-IIIF-82
21)	0811.06.21	LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP) (AIMING POINT-DEFLECTION METHOD)				X	2	LCpl		3-IIIF-82
22)	0811.06.22	LAY A HOWITZER FOR INITIAL DIRECTION OF FIRE, USING M12-SERIES SIGHT				X	2	Pvt		3-IIIF-83
23)	0811.06.23	LAY A HOWITZER BY RECIPROCAL LAY, USING M12-SERIES SIGHT				X	2	Cpl		3-IIIF-84
24)	0811.06.24	ALIGN COLLIMATOR, USING M12-SERIES SIGHT					2	Pvt		3-IIIF-85

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
25)	0811.06.25	ALIGN AIMING POSTS, USING THE M12-SERIES SIGHT					2	Pvt		3-IIIF-85
26)	0811.06.26	BORESIGHT THE M12-SERIES PANORAMIC TELESCOPE, USING A DISTANT AIMING POINT (DAP)					2	Cpl		3-IIIF-86
27)	0811.06.27	BORESIGHT THE M12-SERIES PANORAMIC TELESCOPE, USING A TESTING TARGET					2	Cpl		3-IIIF-86
28)	0811.06.28	LAY A HOWITZER FOR DEFLECTION, USING M12-SERIES SIGHT					2	Pvt		3-IIIF-87
29)	0811.06.29	SUPERVISE DIRECT FIRE WITH THE M101A1 HOWITZER			X		2	SSgt		3-IIIF-87

MOS 0840, NAVAL SURFACE FIRE SUPPORT PLANNER

DUTY AREA 02 - FIRE SUPPORT COORDINATION CENTER (FSCC) OPERATIONS

2)	0840.02.02	BRIEF A MANEUVER COMMANDER ON THE FIRE SUPPORT PLAN			X		3	Capt		3-IVF-8
4)	0840.02.04	CONSOLIDATE/PROCESS SPOTTER'S LISTS OF TARGETS					3	Capt		3-IVF-9
5)	0840.02.05	PREPARE/SUBMIT A LIST OF TARGETS					3	Capt		3-IVF-10
11)	0840.02.11	PREPARE A HIGH-PAYOFF TARGET LIST (HPTL)					3	Capt		3-IVF-13
12)	0840.02.12	PREPARE A TARGET PRECEDENCE LIST					3	Capt		3-IVF-13
13)	0840.02.13	SUPERVISE THE OPERATIONS OF A FIRE SUPPORT COORDINATION CENTER (FSCC)					3	Capt		3-IVF-13
14)	0840.02.14	DEVELOP A QUICK FIRE SUPPORT PLAN					3	Capt		3-IVF-15
15)	0840.02.15	POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)					3	Capt		3-IVF-16
16)	0840.02.16	PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)					3	Capt		3-IVF-16
17)	0840.02.17	LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM					3	Capt		3-IVF-17
18)	0840.02.18	EVALUATE TARGETING INFORMATION					3	Capt		3-IVF-17
19)	0840.02.19	COORDINATE FIRES ACROSS BOUNDARIES					3	Capt		3-IVF-17
20)	0840.02.20	ANALYZE TARGETS TO DETERMINE PRECEDENCE, TYPES, AND QUANTITIES OF FIRE TO BE USED FOR ENGAGING TARGETS					3	Capt		3-IVF-18
21)	0840.02.21	PASS FIRE SUPPORT INFORMATION TO LOWER, ADJACENT, AND HIGHER FIRE SUPPORT COORDINATION CENTERS					3	Capt		3-IVF-19
22)	0840.02.22	MONITOR/COORDINATE REQUESTS FOR NAVAL SURFACE FIRE SUPPORT (NSFS)					3	Capt		3-IVF-19
23)	0840.02.23	PLAN/COORDINATE FIRE SUPPORT TO SUPPRESS ENEMY AIR DEFENSES					3	Capt		3-IVF-20

MOS 0842, FIELD ARTILLERY RADAR OPERATOR

DUTY AREA 03 - RADAR OPERATIONS

10)	0842.03.10	ADJUST INDIRECT FIRE WITH THE RADAR SET AN/TPQ-46					3	Pvt		3-VF-10
11)	0842.03.11	OBSERVE REGISTRATION FOR INDIRECT FIRE WITH THE RADAR SET AN/TPQ-46					3	Pvt		3-VF-10

DUTY AREA 04 - PREPARATION FOR MOVEMENT

3)	0842.04.03	PREPARE THE RADAR SET AN/TPQ-46 FOR MOVEMENT BY HELICOPTER					12	Cpl		3-VF-12
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MOS 0844, FIELD ARTILLERY FIRE CONTROL MAN

DUTY AREA 01 - BATTERY COMPUTER SYSTEM (BCS) GENERAL

2)	0844.01.02	DESTROY THE BATTERY COMPUTER SYSTEM (BCS)					2	Pvt		3-VIF-1
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Annex I to
Appendix G to
ENCLOSURE (3)

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 05 - BATTERY COMPUTER SYSTEM (BCS) REGISTRATIONS AND REGISTRATION CORRECTIONS										
3)	0844.05.03	UPDATE REGISTRATION CORRECTIONS USING SURVEY INFORMATION WITH THE BATTERY COMPUTER SYSTEM (BCS)						2	Cpl	3-VIF-5
DUTY AREA 06 - BATTERY COMPUTER SYSTEM (BCS) SPECIAL SITUATIONS										
2)	0844.06.02	DERIVE A GRAPHICAL FIRING TABLE (GFT) SETTING AND TERRAIN GUN POSITION CORRECTIONS (TGPCS) USING THE BATTERY COMPUTER SYSTEM (BCS)						2	Cpl	3-VIF-7
8)	0844.06.08	ASSIGN TARGETS TO KNOWN POINT FILE WHEN ALREADY IN TARGET FILE USING THE BATTERY COMPUTER SYSTEM (BCS)						2	LCpl	3-VIF-9
12)	0844.06.12	PROCESS A QUICK SMOKE MISSION USING THE BATTERY COMPUTER SYSTEM (BCS)						2	Pvt	3-VIF-11
13)	0844.06.13	PROCESS LASER MISSIONS USING THE BATTERY COMPUTER SYSTEM (BCS)						2	Pvt	3-VIF-11
DUTY AREA 07 - BACK-UP COMPUTER SYSTEM (BUCS) GENERAL										
1)	0844.07.01	PREPARE THE BACK-UP COMPUTER SYSTEM (BUCS) FOR OPERATION						2	Cpl	3-VIF-11
2)	0844.07.02	PERFORM MAINTENANCE ON BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL						2	Cpl	3-VIF-12
DUTY AREA 08 - BACK-UP COMPUTER SYSTEM (BUCS) INITIALIZATION AND DATA BASE										
1)	0844.08.01	INITIALIZE THE BACK-UP COMPUTER SYSTEM (BUCS) AND CONSTRUCT A DATA BASE						2	Cpl	3-VIF-12
2)	0844.08.02	LOAD AND UPDATE A PREVIOUSLY RECORDED BACK-UP COMPUTER SYSTEM (BUCS) DATA BASE						2	Cpl	3-VIF-12
DUTY AREA 09 - BACK-UP COMPUTER SYSTEM (BUCS) FIRE MISSION PROCESSING										
1)	0844.09.01	PROCESS AN AREA FIRE MISSION USING BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-13
DUTY AREA 10 - BACK-UP COMPUTER SYSTEM (BUCS) REGISTRATIONS AND REGISTRATION CORRECTIONS										
1)	0844.10.01	PROCESS A PRECISION REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-13
2)	0844.10.02	PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI) REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-14
3)	0844.10.03	PROCESS A RADAR REGISTRATION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-14
4)	0844.10.04	PERFORM THE CONCURRENT MET PROCEDURE USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-15
5)	0844.10.05	UPDATE REGISTRATION CORRECTIONS WITH SURVEY DATA USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-15
6)	0844.10.06	COMPUTE BATTERY COMPUTER SYSTEM (BCS) TO BUCS RESIDUALS USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-16
DUTY AREA 11 - BACK-UP COMPUTER SYSTEM (BUCS) SPECIAL SITUATIONS										
1)	0844.11.01	PROCESS AN ILLUMINATION MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-16
2)	0844.11.02	PROCESS A SMOKE MISSION USING THE BACK-UP COMPUTER SYSTEM (BUCS)						2	Cpl	3-VIF-17
DUTY AREA 13 - FIRING CHARTS										
3)	0844.13.03	CONSTRUCT AN EMERGENCY FIRING CHART						2	Sgt	3-VIF-43

Annex I to
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SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 15 - MANUAL FIRE MISSION PROCESSING										
7)	0844.15.07	PROCESS A LOW ANGLE ILLUMINATION FIRE MISSION (1 GUN, 2 GUN RANGE AND LATERAL SPREAD, COORDINATED ILLUMINATION) (TABULAR FIRING TABLES (TFT)/GRAPHICAL FIRING TABLE (GFT))				2	Pvt			3-VIF-47
8)	0844.15.08	PROCESS A HIGH ANGLE ILLUMINATION MISSION USING A TABULAR FIRING TABLE (TFT)				2	Cpl			3-VIF-47
9)	0844.15.09	PROCESS A FIRE MISSION FOR IMMEDIATE SUPPRESSION/SMOKE				2	Cpl			3-VIF-48
DUTY AREA 16 - MANUAL REGISTRATIONS										
3)	0844.16.03	PROCESS A HIGH BURST/MEAN POINT OF IMPACT (HB/MPI) REGISTRATION				2	LCpl			3-VIF-50
4)	0844.16.04	DETERMINE TRANSFER LIMITS AND DETERMINE A GRAPHICAL FIRING TABLE (GFT) SETTING AND DEFLECTION CORRECTIONS				2	Sgt			3-VIF-50
5)	0844.16.05	DETERMINE TOTAL CORRECTIONS AND CONSTRUCT A GRAPHICAL FIRING TABLE (GFT) SETTING FROM A DPICM-SR REGISTRATION				2	Cpl			3-VIF-51
6)	0844.16.06	UPDATE A GRAPHICAL FIRING TABLE (GFT) SETTING WHEN TRANSFERRING FROM A MAP SPOT OR OBSERVED FIRING CHART				2	Sgt			3-VIF-51
7)	0844.16.07	PROCESS A RADAR REGISTRATION				2	Cpl			3-VIF-51
8)	0844.16.08	PROCESS A SECOND LOT REGISTRATION				2	Cpl			3-VIF-52
DUTY AREA 17 - VALIDATE METEOROLOGICAL MESSAGE										
1)	0844.17.01	VERIFY METEOROLOGICAL (MET) MESSAGES				2	Sgt			3-VIF-52
DUTY AREA 18 - MUZZLE VELOCITY										
1)	0844.18.01	VERIFY THE M94 VELOCIMETER DATA				2	Cpl			3-VIF-53
2)	0844.18.02	RECORD THE HISTORICAL MUZZLE VELOCITY (FIRST LOT CALIBRATION) AND INFER A SECOND LOT CALIBRATION USING THE MUZZLE VELOCITY RECORD (DA FORM 4982-R)				2	Cpl			3-VIF-53
3)	0844.18.03	DETERMINE MUZZLE VELOCITY VARIANCES (MVVS) BASED ON SHOOTING STRENGTH AND PROPELLANT EFFICIENCIES				2	Sgt			3-VIF-53
DUTY AREA 19 - MANUAL SPECIAL SITUATIONS										
1)	0844.19.01	PROCESS A QUICK SMOKE MISSION				2	Cpl			3-VIF-54
2)	0844.19.02	PROCESS A FIRE MISSION FOR SHELL ROCKET ASSISTED PROJECTILE (RAP)				2	Cpl			3-VIF-54
3)	0844.19.03	PROCESS A LASER FIRE MISSION				2	Cpl			3-VIF-55
4)	0844.19.04	PROCESS A RADAR ADJUST FIRE MISSION				3	Cpl			3-VIF-55
5)	0844.19.05	PROCESS A DESTRUCTION MISSION				3	Cpl			3-VIF-55
6)	0844.19.06	PROCESS A SWEEP AND ZONE FIRE MISSION				3	Sgt			3-VIF-56
7)	0844.19.07	PROCESS AN AERIAL OBSERVER MISSION (RANGING ROUNDS)				3	Sgt			3-VIF-56
8)	0844.19.08	REPLOT TARGETS AND DETERMINE REPLOT DATA (FZ QUICK AND VT)				3	Sgt			3-VIF-56
9)	0844.19.09	DETERMINE AND ANNOUNCE REFINEMENT DATA FOR FUZE TIME				3	Sgt			3-VIF-57
10)	0844.19.10	MAINTAIN FIRE COMMANDS FOR PREPLANNED/PRIORITY TARGETS				3	Cpl			3-VIF-57
DUTY AREA 20 - MANUAL FIRE PLANNING										
1)	0844.20.01	MAINTAIN A TACTICAL SITUATION MAP				2	LCpl			3-VIF-57
2)	0844.20.02	PROCESS FORWARD OBSERVER'S (FO) LISTS OF TARGETS				2	LCpl			3-VIF-58
3)	0844.20.03	UPDATE A TARGET LIST				2	LCpl			3-VIF-58
4)	0844.20.04	PROCESS A FIRE PLAN				2	Sgt			3-VIF-58

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5)	0844.20.05	MAINTAIN A FIRE DIRECTION CENTER (FDC) JOURNAL						2	LCpl	3-VIF-59
DUTY AREA 21 - TARGET PRODUCTION CENTER OPERATIONS										
1)	0844.21.01	PREPARE/MAINTAIN A TARGET PRODUCTION MAP AND OVERLAYS			X			2	PFC	3-VIF-59
2)	0844.21.02	PREPARE/MAINTAIN THE TARGET CARD FILE			X			2	PFC	3-VIF-59
3)	0844.21.03	EVALUATE TARGETING INFORMATION			X			2	Cpl	3-VIF-60
4)	0844.21.04	MONITOR THE OPERATION OF ALL COUNTERBATTERY RADAR (CBR) PLATOON ASSETS			X			2	Sgt	3-VIF-61
5)	0844.21.05	RECOMMEND COVERAGE OF THE AREA OF OPERATIONS BY COUNTERBATTERY RADAR (CBR) ASSETS			X			2	Sgt	3-VIF-61
DUTY AREA 26 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) TACTICAL FIRE CONTROL										
1)	0844.26.01	INPUT MODIFICATIONS TO THE COMMANDER'S CRITERIA FILE						2	Cpl	3-VIF-65
2)	0844.26.02	PROCESS A FIRE MISSION REQUEST						2	Cpl	3-VIF-65
DUTY AREA 27 - INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS) NONNUCLEAR FIRE PLANNING										
1)	0844.27.01	COMPUTE A NON-NUCLEAR FIRE PLAN						2	Cpl	3-VIF-66
2)	0844.27.02	COMPUTE A PLANNED FAMILY OF SCATTERABLE MINES (FASCAM) MINE FIELD WITH IFSAS						2	Cpl	3-VIF-67
DUTY AREA 29 - ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS) OPERATIONS										
2)	0844.29.02	ESTABLISH A MULTI-WORKSTATION OPERATIONAL FACILITY (OPFAC)						2	Pvt	3-VIF-73
9)	0844.29.09	ENTER FIRE SUPPORT ATTACK GUIDANCES						2	Pvt	3-VIF-76
MOS 0845, NAVAL GUNFIRE SPOTTER										
DUTY AREA 01 - NAVAL GUNFIRE SPOTTING OPERATIONS										
1)	0845.01.01	SUPERVISE THE EMPLOYMENT OF A NAVAL GUNFIRE (NGF) SPOT TEAM			X			2	2ndLt	3-VIIF-1
DUTY AREA 02 - NGF SPOTTING PROCEDURES										
14)	0845.02.14	CONDUCT A PRE-ARMED CALIBRATION FIRE (PACFIRE)						2	2ndLt	3-VIIF-10
16)	0845.02.16	INSTALL AN/MRC-138 RADIO SET			X			3	2ndLt	3-VIIF-11
17)	0845.02.17	OPERATE AN AN/MRC-138 RADIO SET			X			3	2ndLt	3-VIIF-12
18)	0845.02.18	PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET			X			2	2ndLt	3-VIIF-12
19)	0845.02.19	EMPLOY THE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)						2	2ndLt	3-VIIF-13
21)	0845.02.21	DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN						2	2ndLt	3-VIIF-14
23)	0845.02.23	CONDUCT A DESTRUCTION MISSION						2	2dLt	3-VIIF-15
DUTY AREA 04 - MAP READING AND LAND NAVIGATION										
4)	0845.04.04	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED			X			2	2ndLt	3-VIIF-22
8)	0845.04.08	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST						2	2ndLt	3-VIIF-25
9)	0845.04.09	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS						2	2ndLt	3-VIIF-25

SEQ TASK TITLE CORE FLC DL PST SUS REQ BY PAGE

MOS 0847, ARTILLERY METEOROLOGICAL MAN

DUTY AREA 01 - METEOROLOGICAL GENERAL

13)	0847.01.13	DETERMINE AND RECORD LOCATION AND HEIGHT OF THE METEOROLOGICAL STATION			3	Cpl	3-VIIIF-9
19)	0847.01.19	PREPARE A LOADING PLAN FOR A METEOROLOGICAL (MET) SECTION	X		3	Sgt	3-VIIIF-14
20)	0847.01.20	PLAN THE DESTRUCTION OF THE METEOROLOGICAL (MET) SECTION'S EQUIPMENT AND MATERIAL TO PREVENT ENEMY USE			3	Sgt	3-VIIIF-15

MOS 0848, FIELD ARTILLERY OPERATIONS MAN

DUTY AREA 01 - FIRE DIRECTION CENTER (FDC) GENERAL

3)	0848.01.03	DETERMINE THE AMOUNT AND TYPE OF MUNITIONS NEEDED TO ACHIEVE SUPPRESSION, NEUTRALIZATION, OR DESTRUCTION OF TARGETS			2	SSgt	3-IXF-2
6)	0848.01.06	PREPARE THE FIRE DIRECTION CENTER (FDC) TO CONDUCT FIRE MISSIONS INTO A SECONDARY ZONE (ZONE TO ZONE TRANSFORMATION)			2	SSgt	3-IXF-3
7)	0848.01.07	SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS			2	SSgt	3-IXF-4
11)	0848.01.11	SUPERVISE THE MAINTENANCE OF FIRE DIRECTION EQUIPMENT	X		2	SSgt	3-IXF-5
12)	0848.01.12	SUPERVISE THE DESTRUCTION OF THE BATTERY COMPUTER SYSTEM (BCS)			2	SSgt	3-IXF-6

DUTY AREA 06 - BATTERY COMPUTER SYSTEM (BCS) REGISTRATIONS AND REGISTRATION CORRECTIONS

6)	0848.06.06	SUPERVISE THE LOCATING OF AN OBSERVER BY TRILATERATION, TRIANGULATION OR RESECTION, USING THE BATTERY COMPUTER SYSTEM (BCS)			2	SSgt	3-IXF-24
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DUTY AREA 13 - SURVEY

35)	0848.13.35	SUPERVISE THE PERFORMANCE OF OPERATOR'S MAINTENANCE ON AN M2A2 AIMING CIRCLE	X	X	2	SSgt	3-IXF-60
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DUTY AREA 20 - MANUAL SPECIAL SITUATIONS

5)	0848.20.05	ASSIST AN UNTRAINED OBSERVER WITH THE CONDUCT OF A FIRE MISSION			2	SSgt	3-IXF-77
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DUTY AREA 22 - CONVERSION FROM AUTOMATED TO MANUAL GUNNERY PROCEDURES

1)	0848.22.01	ESTABLISH A MANUAL BACK-UP FOR AUTOMATED OPERATIONS			2	SSgt	3-IXF-80
2)	0848.22.02	CONVERT AN AUTOMATED MISSION IN PROGRESS TO MANUAL PROCEDURES			2	SSgt	3-IXF-81

DUTY AREA 23 - ALTERNATE MANUAL TECHNIQUES

1)	0848.23.01	DETERMINE FIRING DATA USING EMERGENCY OBSERVER PROCEDURES (BLACK MAGIC)			2	SSgt	3-IXF-81
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DUTY AREA 26 - MANUAL FIRE PLANNING

1)	0848.26.01	SUPERVISE THE MAINTENANCE OF A TACTICAL SITUATION MAP			2	SSgt	3-IXF-89
2)	0848.26.02	SUPERVISE THE CONSOLIDATION, PROCESSING, AND UPDATING OF TARGET LISTS			2	SSgt	3-IXF-89
3)	0848.26.03	SUPERVISE THE PROCESSING OF A FIRE PLAN			2	SSgt	3-IXF-89

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DUTY AREA 29 - TARGET PROCESSING										
1)	0848.29.01	SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS			X			3	SSgt	3-IXF-96
2)	0848.29.02	SUPERVISE MAINTENANCE OF THE TARGET PRODUCTION MAP			X			3	SSgt	3-IXF-97
3)	0848.29.03	SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS			X			3	SSgt	3-IXF-97
DUTY AREA 36 - MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) TECHNIQUES AND OPERATIONS										
1)	0848.36.01	DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE USE OF THE INITIAL FIRE SUPPORT AUTOMATED SYSTEM (IFSAS)						2	SSgt	3-IXF-114
DUTY AREA 37 - 81 MM MORTAR PLATOON OPERATIONS										
2)	0848.37.02	DETERMINE TERRAIN GUN POSITION CORRECTIONS			X			2	SSgt	3-IXF-116
3)	0848.37.03	DETERMINE SPECIAL CORRECTIONS			X			2	SSgt	3-IXF-117
4)	0848.37.04	DETERMINE HASTY SPECIAL CORRECTIONS			X			2	SSgt	3-IXF-118
5)	0848.37.05	DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF OFFENSIVE OPERATIONS			X			2	SSgt	3-IXF-118
6)	0848.37.06	DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF DEFENSIVE OPERATIONS			X			2	SSgt	3-IXF-119
7)	0848.37.07	SELECT A MORTAR POSITION			X			2	SSgt	3-IXF-119
8)	0848.37.08	LAY MORTAR SECTION/PLATOON PARALLEL				X		2	SSgt	3-IXF-120
9)	0848.37.09	DIRECT FIRE DIRECTION CENTER (FDC) OPERATIONS			X			2	SSgt	3-IXF-120
10)	0848.37.10	DIRECT A MORTAR SECTION/PLATOON DISPLACEMENT			X			2	SSgt	3-IXF-122
MOS 0861, FIRE SUPPORT MAN										
DUTY AREA 01 - MAP READING AND M2 COMPASS										
8)	0861.01.08	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST						2	Pvt	3-XF-4
9)	0861.01.09	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS						2	Pvt	3-XF-4
15)	0861.01.15	CONDUCT BATTLEFIELD REPORTING			X	X		2	Pvt	3-XF-8
DUTY AREA 02 - COMMUNICATIONS										
2)	0861.02.02	ENCODE/DECODE/AUTHENTICATE USING THE NUMERAL CIPHER/AUTHENTICATION SYSTEM			X			2	Pvt	3-XF-10
4)	0861.02.05	TRANSMIT A MESSAGE UTILIZING NATO FORMAT						2	Pvt	3-XF-11
5)	0861.02.06	DRAFT A MESSAGE USING NATO FORMAT						2	Pvt	3-XF-12
7)	0861.02.08	INSTALL AN/VRC-88 RADIO SET			X			2	Pvt	3-XF-12
8)	0861.02.09	OPERATE A AN/VRC-88 RADIO SET			X			2	Pvt	3-XF-13
9)	0861.02.10	INSTALL AN/MRC-145 RADIO SET			X			2	Pvt	3-XF-13
10)	0861.02.11	OPERATE AN AN/MRC-145 RADIO SET			X			2	Pvt	3-XF-14
12)	0861.02.16	INSTALL AN/MRC-138 RADIO SET			X			2	Pvt	3-XF-15
13)	0861.02.17	OPERATE AN AN/MRC-138 RADIO SET			X			2	Pvt	3-XF-16
14)	0861.02.18	PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET			X			2	Pvt	3-XF-16
17)	0861.02.21	OPERATE AND MAINTAIN A FIELD PHONE			X			2	Pvt	3-XF-19
18)	0861.02.22	EMPLOY THE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)						2	Pvt	3-XF-20
20)	0861.02.24	IDENTIFY ELECTRONIC COUNTERMEASURES (ECM) AND IMPLEMENT ELECTRONIC COUNTER-COUNTERMEASURES (ECCM)			X			2	Pvt	3-XF-21

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21)	0861.02.25	PREPARE/SUBMIT OPERATOR'S MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI) REPORT			X			2	Pvt	3-XF-22
DUTY AREA 03 - OBSERVED FIRE PROCEDURES										
6)	0861.03.06	PREPARE A VISIBILITY DIAGRAM			X			2	Pvt	3-XF-25
22)	0861.03.22	CONDUCT A FASCAM MISSION			X			2	Pvt	3-XF-36
23)	0861.03.23	CONDUCT A DPICM MISSION			X			2	Pvt	3-XF-36
25)	0861.03.26	CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY						2	Pvt	3-XF-38
26)	0861.03.27	ADJUST FINAL PROTECTIVE FIRES			X			2	Pvt	3-XF-38
29)	0861.03.30	CONDUCT A DESTRUCTION MISSION						2	Pvt	3-XF-41
35)	0861.03.36	CONDUCT A MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH AN AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)						2	Pvt	3-XF-45
36)	0861.03.37	CONDUCT EMERGENCY OBSERVER PROCEDURES						2	Pvt	3-XF-46
37)	0861.03.38	CONDUCT A MORTAR PRECISION REGISTRATION						2	Pvt	3-XF-47
38)	0861.03.40	CONDUCT FIRE MISSION ON IRREGULARLY SHAPED TARGETS						2	Pvt	3-XF-47
39)	0861.03.41	CONDUCT A COPPERHEAD MISSION						2	Pvt	3-XF-48
40)	0861.03.42	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE			X	X		2	Pvt	3-XF-49
DUTY AREA 04 - FIRE SUPPORT PLANNING AND COORDINATION										
1)	0861.04.01	MAINTAIN INFORMATION ON FIRE SUPPORT STATUS CHART						2	Cpl	3-XF-57
2)	0861.04.02	POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)						2	Cpl	3-XF-58
3)	0861.04.03	PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)						2	Cpl	3-XF-58
4)	0861.04.04	PREPARE/SUBMIT A LIST OF TARGETS						2	Pvt	3-XF-59
5)	0861.04.05	CONSOLIDATE/PROCESS FORWARD OBSERVER'S (FO) LISTS OF TARGETS						2	Cpl	3-XF-59
6)	0861.04.06	PREPARE A TARGET BULLETIN (TARBUL)						2	Cpl	3-XF-60
9)	0861.04.09	DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN						2	Sgt	3-XF-61
10)	0861.04.10	LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM			X			2	Cpl	3-XF-62
11)	0861.04.12	EVALUATE TARGETING INFORMATION			X			2	Cpl	3-XF-62
26)	0861.04.27	INTEGRATE COMPANY ORGANIC INDIRECT FIRE WEAPONS INTO FIRE PLANS			X			2	LCpl	3-XF-72
DUTY AREA 05 - COUNTERFIRE										
1)	0861.05.01	PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS			X			6	Pvt	3-XF-74
2)	0861.05.02	PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE DELAY CRATERS			X			6	Pvt	3-XF-75
3)	0861.05.03	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS			X			6	Pvt	3-XF-76
4)	0861.05.04	PERFORM SHELL FRAGMENT ANALYSIS			X			6	Pvt	3-XF-76
5)	0861.05.05	PREPARE/SUBMIT STANDARD SHELLING, MORTARING, AND BOMBING REPORT			X	X		6	Pvt	3-XF-77

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DUTY AREA 07 - OBSERVER DIGITAL TERMINAL (ODT)										
9)	0861.07.09	REPORT ENEMY ACTIVITY BY THE USE OF THE ARTILLERY TARGET INTELLIGENCE (ATI) MESSAGES WITH THE OBSERVER DIGITAL TERMINAL (ODT)			X		2	Pvt		3-XF-82
10)	0861.07.10	TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE OBSERVER DIGITAL TERMINAL (ODT)					2	Pvt		3-XF-83
11)	0861.07.11	REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE OBSERVER DIGITAL TERMINAL (ODT)			X		2	Pvt		3-XF-83
12)	0861.07.12	INPUT A TARGET IN THE KNOWN POINT FILE WITH THE OBSERVER DIGITAL TERMINAL (ODT)					2	Pvt		3-XF-83
13)	0861.07.13	VERIFY OBSERVER DIGITAL TERMINAL (ODT) INITIALIZATION					2	LCpl		3-XF-84
14)	0861.07.14	VERIFY OBSERVER DIGITAL TERMINAL (ODT) INPUT MESSAGES					2	Sgt		3-XF-84
15)	0861.07.15	SUPERVISE THE PROCESSING OF A FIRE REQUEST FROM AN OBSERVER DIGITAL TERMINAL (ODT) EQUIPPED BATTALION FIRE SUPPORT COORDINATION CENTER (FSCC)					2	Sgt		3-XF-84
DUTY AREA 08 - LIGHTWEIGHT COMPUTER UNIT (LCU) OPERATIONS										
1)	0861.08.01	PREPARE THE LIGHTWEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STCP) FOR OPERATIONS					2	LCpl		3-XF-85
2)	0861.08.02	PREPARE LIGHTWEIGHT COMPUTER UNIT (LCU) DUAL TERMINAL COMMAND POST (DTCP) FOR OPERATIONS					2	LCpl		3-XF-86
3)	0861.08.03	ESTABLISH COMMUNICATION PARAMETERS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-86
4)	0861.08.04	VERIFY LIGHTWEIGHT COMPUTER UNIT (LCU) SETUP CONFIGURATIONS					2	LCpl		3-XF-87
5)	0861.08.05	VERIFY INITIALIZATION DATA WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-87
6)	0861.08.06	VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-88
7)	0861.08.07	INPUT DATA INTO THE SUPPORT PROGRAM OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-88
8)	0861.08.08	INPUT DATA INTO THE AMMUNITION AND FIRE UNIT INFORMATION FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	LCpl		3-XF-89
9)	0861.08.09	INPUT COMMANDER'S CRITERIA INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-90
10)	0861.08.10	PROCESS A FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-90
11)	0861.08.11	PROCESS A SPECIAL FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-91
12)	0861.08.12	INPUT AND RETRIEVE TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-92
13)	0861.08.13	MODIFY THE ATI MODE 3 MODIFICATION FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-93
14)	0861.08.14	COMPUTE A NONNUCLEAR FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-93
15)	0861.08.15	COMPUTE A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	LCpl		3-XF-94
DUTY AREA 09 - LIGHTWEIGHT COMPUTER UNIT (LCU) SUPERVISION										
1)	0861.09.01	VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	Sgt		3-XF-95

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SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
2)	0861.09.02	VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)					2	Sgt		3-XF-96
3)	0861.09.03	VERIFY THE INPUT OF COMMANDER'S CRITERIA INFORMATION IN THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-96
4)	0861.09.04	SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-97
5)	0861.09.05	SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-97
6)	0861.09.06	SUPERVISE THE INPUT AND RETRIEVAL OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-99
7)	0861.09.07	VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-99
8)	0861.09.08	DIRECT THE BUILDING AND COMPUTATION OF A NONNUCLEAR FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-100
9)	0861.09.09	DIRECT THE BUILDING AND COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-101
10)	0861.09.10	DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-101
11)	0861.09.11	DIRECT THE PREPARATION AND MAINTENANCE OF THE MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) FILE MANAGEMENT SYSTEM WITHIN THE FIRE SUPPORT COORDINATION CENTER (FSCC) WITH THE LIGHTWEIGHT COMPUTER UNIT (LCU)					3	Sgt		3-XF-102

Annex I to
Appendix G to
ENCLOSURE (3)

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Annex I to
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ENCLOSURE (3)

INDIVIDUAL TRAINING STANDARDS SUPPORTED BY DISTANCE LEARNING PRODUCTS

This appendix includes a summary listing of all ITS tasks that have at least one currently available or planned distance learning (DL) product associated with them. They are grouped by MOS and Duty Area.

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
MOS 0802, FIELD ARTILLERY OFFICER										
DUTY AREA 01 - OBSERVED FIRE										
1)	0802.01.01	DIRECT THE OPERATIONS OF THE FORWARD OBSERVER (FO) TEAM	X	X	X	X	2	2ndLt	3-IF-1	
3)	0802.01.03	PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	X	X	X		2	2ndLt	3-IF-3	
4)	0802.01.04	CONSTRUCT A TERRAIN SKETCH	X	X	X		2	2ndLt	3-IF-3	
5)	0802.01.05	PREPARE A VISIBILITY DIAGRAM			X		2	2ndLt	3-IF-4	
6)	0802.01.06	LOCATE A TARGET BY GRID COORDINATES	X	X	X		2	2ndLt	3-IF-4	
7)	0802.01.07	LOCATE A TARGET BY POLAR PLOT	X	X	X		2	2ndLt	3-IF-5	
8)	0802.01.08	LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	X	X	X		2	2ndLt	3-IF-5	
9)	0802.01.09	CONDUCT AN ADJUST FIRE MISSION	X	X	X		2	2ndLt	3-IF-6	
13)	0802.01.13	CONDUCT A MISSION ON A PLANNED TARGET	X	X	X		2	2ndLt	3-IF-9	
14)	0802.01.14	CONDUCT AN IMMEDIATE SUPPRESSION MISSION	X	X	X		2	2ndLt	3-IF-10	
15)	0802.01.15	CONDUCT A FIRE FOR EFFECT (FFE) MISSION	X	X	X		2	2ndLt	3-IF-10	
16)	0802.01.16	CONDUCT AN ILLUMINATION MISSION	X	X	X		2	2ndLt	3-IF-11	
17)	0802.01.17	CONDUCT A COORDINATED ILLUMINATION MISSION	X	X	X		2	2ndLt	3-IF-12	
18)	0802.01.18	CONDUCT A FASCAM MISSION			X		2	2ndLt	3-IF-12	
19)	0802.01.19	CONDUCT A DPICM MISSION			X		2	2ndLt	3-IF-13	
20)	0802.01.20	CONDUCT A DANGER CLOSE FIRE MISSION	X	X	X		2	2ndLt	3-IF-14	
22)	0802.01.22	ADJUST FINAL PROTECTIVE FIRES			X		2	2ndLt	3-IF-15	
23)	0802.01.23	CONDUCT AN IMMEDIATE SMOKE MISSION	X	X	X		2	2ndLt	3-IF-16	
24)	0802.01.24	CONDUCT A QUICK SMOKE MISSION	X	X	X		2	2ndLt	3-IF-17	
27)	0802.01.27	CONDUCT A PRECISION REGISTRATION, QUICK AND TIME	X	X	X		2	2ndLt	3-IF-19	
28)	0802.01.28	CONDUCT A HIGH-BURST OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION	X	X	X		2	2ndLt	3-IF-20	
29)	0802.01.29	CONDUCT AN ABBREVIATED REGISTRATION	X	X	X		2	2ndLt	3-IF-21	
31)	0802.01.31	ADJUST NAVAL GUNFIRE (NGF)			X		6	2ndLt	3-IF-22	
34)	0802.01.34	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE			X	X	2	2ndLt	3-IF-24	
DUTY AREA 03 - CANNON										
1)	0802.03.01	EMPLOY THE APPROPRIATE HASTY SURVEY TECHNIQUE FOR DIRECTIONAL AND POSITIONAL CONTROL	X	X	X	X	2	2ndLt	3-IF-33	
3)	0802.03.03	LAY THE FIRING BATTERY	X	X	X	X	2	2ndLt	3-IF-35	
6)	0802.03.06	DECLINATE THE AIMING CIRCLE	X	X	X	X	2	2ndLt	3-IF-37	
7)	0802.03.07	MEASURE THE ORIENTING ANGLE (OA)	X	X	X	X	2	2ndLt	3-IF-38	
8)	0802.03.08	MEASURE THE AZIMUTH OF THE LINE OF FIRE	X	X	X	X	2	2ndLt	3-IF-38	
10)	0802.03.10	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X	X	2	2ndLt	3-IF-40	
17)	0802.03.17	SET UP AND RECOVER THE M2A2 AIMING CIRCLE	X	X	X	X	2	2ndLt	3-IF-43	
18)	0802.03.18	PERFORM CRATER ANALYSIS			X		6	2ndLt	3-IF-44	
19)	0802.03.19	PERFORM SHELL FRAGMENT ANALYSIS			X		6	2ndLt	3-IF-44	
21)	0802.03.21	VERIFY THE UNIT COMMANDER'S RECORD (NAVMC 10558A)			X		2	2ndLt	3-IF-46	
DUTY AREA 04 - FIRE SUPPORT										
16)	0802.04.16	PLAN FIRE SUPPORT FOR MARINE AIR GROUND TASK FORCE (MAGTF) OPERATIONS	X	X			2	Capt	3-IF-57	

Annex II to
Appendix G to
ENCLOSURE (3)

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 05 - UNIT OPERATIONS										
2)	0802.05.02	DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT			X			2	2ndLt	3-IF-58
3)	0802.05.03	CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION	X	X	X	X		2	2ndLt	3-IF-59
4)	0802.05.04	SUPERVISE A TACTICAL ROAD MARCH	X	X	X			2	2ndLt	3-IF-59
6)	0802.05.06	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X	X		2	2ndLt	3-IF-61
7)	0802.05.07	SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING			X			2	2ndLt	3-IF-61
8)	0802.05.08	SUPERVISE THE OPERATIONS OF A SURVEY SECTION			X	X		2	Capt	3-IF-62
DUTY AREA 06 - COMMUNICATIONS										
1)	0802.06.01	OPERATE FIRE SUPPORT COMMUNICATIONS SYSTEMS	X	X	X			2	2ndLt	3-IF-62
2)	0802.06.02	OPERATE AN ARTILLERY UNIT'S COMMUNICATION SYSTEM	X	X	X			2	2ndLt	3-IF-63
3)	0802.06.03	CONSTRUCT AND REPAIR FIELD EXPEDIENT ANTENNA			X			2	2ndLt	3-IF-64
DUTY AREA 10 - MAINTENANCE										
1)	0802.10.01	DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT	X	X	X			2	2ndLt	3-IF-891
DUTY AREA 11 - LOGISTICS/SUPPLY/COMBAT SERVICE SUPPORT										
1)	0802.11.01	COORDINATE LOGISTICS			X			2	2ndLt	3-IF-90
DUTY AREA 12 - NBC DEFENSE OPERATIONS										
1)	0802.12.01	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA			X	X		6	2ndLt	3-IF-91
2)	0802.12.02	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT			X	X		6	2ndLt	3-IF-92
3)	0802.12.03	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT			X	X		6	2ndLt	3-IF-93
4)	0802.12.04	SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR NUCLEAR ATTACK			X			6	2ndLt	3-IF-94
DUTY AREA 13 - EMBARKATION										
1)	0802.13.01	SUPERVISE EMBARKATION			X			6	2ndLt	3-IF-95
MOS 0803, SURVEY, METEOROLOGICAL, AND RADAR OFFICER										
DUTY AREA 01 - SURVEY OPERATIONS										
2)	0803.01.02	SUPERVISE THE LOADING/MOVEMENT/EMPLACEMENT/DESTRUCTION OF SURVEY EQUIPMENT	X	X	X			3	WO1	3-IIF-1
3)	0803.01.03	PLAN A SURVEY OPERATION	X	X	X			3	WO1	3-IIF-2
4)	0803.01.04	SUPERVISE SURVEY OPERATIONS	X	X	X	X		3	WO1	3-IIF-2
5)	0803.01.06	VERIFY PREVENTIVE MAINTENANCE, CHECKS, AND SERVICES ON ALL SURVEY EQUIPMENT AND ASSIGNED VEHICLES	X	X	X			3	WO1	3-IIF-3
6)	0803.01.07	SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION	X	X	X	X		6	WO1	3-IIF-4
7)	0803.01.08	SUPERVISE THE CONDUCT OF A CRATER ANALYSIS	X	X	X			6	WO1	3-IIF-5
DUTY AREA 04 - TARGETING										
1)	0803.04.01	PERFORM INTELLIGENCE PREPARATION OF THE BATTLEFIELD	X	X	X			3	WO1	3-IIF-12

SEQ TASK TITLE CORE FLC DL PST SUS REQ BY PAGE

MOS 0811, FIELD ARTILLERY CANNONEER

DUTY AREA 01 - CANNONEER

1)	0811.01.01	MOUNT/DISMOUNT A MACHINEGUN ON A 5-TON TRUCK			X			2	Pvt	3-IIIF-1
2)	0811.01.02	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED			X		X	2	Pvt	3-IIIF-1
3)	0811.01.03	PREPARE A POSITION TO RECEIVE OR TO EMPLACE A HOWITZER	X	X	X			2	Pvt	3-IIIF-2
4)	0811.01.04	EMPLACE AND RECOVER THE COLLIMATOR	X	X	X			2	Pvt	3-IIIF-2
5)	0811.01.05	EMPLACE AND RECOVER THE AIMING POSTS	X	X	X			2	Pvt	3-IIIF-3
7)	0811.01.07	PREPARE SEPARATE-LOADING PROJECTILE FOR FIRING	X	X	X			2	Pvt	3-IIIF-4
8)	0811.01.08	PREPARE SEPARATE-LOADING PROPELLANT FOR FIRING	X	X	X			2	Pvt	3-IIIF-5
10)	0811.01.10	UNPACK THE M712/M823 PROJECTILE	X	X	X			6	Pvt	3-IIIF-7
11)	0811.01.11	PREPARE THE M712/M823 PROJECTILE FOR FIRING	X	X	X			6	Pvt	3-IIIF-8
12)	0811.01.12	UNLOAD THE M712/M823 PROJECTILE	X	X	X			6	Pvt	3-IIIF-8
13)	0811.01.13	REPACK THE M712/M823 PROJECTILE	X	X	X			6	Pvt	3-IIIF-9
14)	0811.01.14	COMMAND, "CHECK FIRING", WHEN AN UNSAFE CONDITION EXISTS	X	X	X			2	Pvt	3-IIIF-10
15)	0811.01.16	EMPLOY SECTION EQUIPMENT	X	X	X			2	Pvt	3-IIIF-11
16)	0811.01.17	GUIDE TRUCK/HOWITZER, USING HAND AND ARM SIGNALS	X	X	X			2	Pvt	3-IIIF-11
21)	0811.01.22	DISASSEMBLE AND ASSEMBLE THE FIRING MECHANISM	X	X	X			2	Pvt	3-IIIF-13
22)	0811.01.23	DISASSEMBLE AND ASSEMBLE THE BREECHBLOCK	X	X	X			2	Pvt	3-IIIF-14
23)	0811.01.24	LOAD AND FIRE A PREPARED ROUND	X	X	X			2	Pvt	3-IIIF-14
24)	0811.01.25	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)	X	X	X			2	Pvt	3-IIIF-15
25)	0811.01.26	TAKE IMMEDIATE ACTION FOR MISFIRE	X	X	X			2	Pvt	3-IIIF-16
26)	0811.01.27	PERFORM PREFIRE CHECKS	X	X	X			2	Pvt	3-IIIF-16

DUTY AREA 02 - GUNNER/ASSISTANT GUNNER

1)	0811.02.01	DESTROY A HOWITZER			X			6	Cpl	3-IIIF-17
2)	0811.02.02	TEST THE GUNNER'S QUADRANT			X			3	Sgt	3-IIIF-17
3)	0811.02.03	LAY FOR QUADRANT, USING THE GUNNER'S QUADRANT			X			2	Sgt	3-IIIF-17
4)	0811.02.04	MEASURE THE QUADRANT, USING THE GUNNER'S QUADRANT			X			2	Sgt	3-IIIF-17
5)	0811.02.05	LAY A HOWITZER BY RECIPROCAL LAY, USING M100-SERIES SIGHT			X		X	2	Sgt	3-IIIF-17
6)	0811.02.06	PREPARE A GUNNER'S REFERENCE CARD			X			2	Sgt	3-IIIF-19
10)	0811.02.12	OPERATE THE MUZZLE VELOCITY SYSTEM (MVS)			X			2	Cpl	3-IIIF-21
11)	0811.02.13	LEAD A REACTION FORCE			X			2	Cpl	3-IIIF-22
12)	0811.02.14	ALIGN AIMING POSTS, USING M100-SERIES SIGHT			X			2	Sgt	3-IIIF-22
13)	0811.02.15	ALIGN COLLIMATOR, USING M100-SERIES SIGHT			X			2	Sgt	3-IIIF-23
14)	0811.02.16	LAY A HOWITZER FOR DEFLECTION, USING M100-SERIES SIGHT			X		X	2	Sgt	3-IIIF-23
15)	0811.02.17	REFER THE PIECE			X		X	2	Sgt	3-IIIF-24
16)	0811.02.18	REPORT THE CORRECT DEFLECTION			X		X	2	Sgt	3-IIIF-25
17)	0811.02.19	LAY THE M198 HOWITZER FOR INITIAL DIRECTION OF FIRE			X		X	2	Sgt	3-IIIF-25
18)	0811.02.20	CONDUCT DIRECT FIRE WITH THE M100-SERIES PANORAMIC TELESCOPE (M137)			X			2	Sgt	3-IIIF-26
19)	0811.02.21	BORESIGHT WITH THE AIMING CIRCLE			X			2	Sgt	3-IIIF-27
20)	0811.02.22	PREPARE A RANGE CARD FOR A HOWITZER			X			2	Sgt	3-IIIF-28
21)	0811.02.23	SUPERVISE LOADING AND SECURING OF HOWITZER AMMUNITION IN PREPARATION FOR TRANSPORT			X			2	Sgt	3-IIIF-28
22)	0811.02.24	MEASURE BORESIGHT ERROR			X			2	Sgt	3-IIIF-29
23)	0811.02.25	BORESIGHT THE DIRECT FIRE ELBOW TELESCOPE, USING A DISTANT AIMING POINT (DAP)			X			2	Cpl	3-IIIF-29

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
24)	0811.02.26	LAY THE HOWITZER FOR QUADRANT, USING THE M18 OR M17 FIRE CONTROL QUADRANT			X			2	Cpl	3-IIIF-30
25)	0811.02.27	MEASURE THE QUADRANT, USING THE M17 OR M18 FIRE CONTROL QUADRANT			X			2	Cpl	3-IIIF-30
26)	0811.02.28	SIGHT ON A TARGET, USING THE DIRECT FIRE ELBOW TELESCOPE			X			2	Cpl	3-IIIF-31
27)	0811.02.29	LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP)			X	X		2	Cpl	3-IIIF-31
28)	0811.02.30	CHECK BORESIGHT OF THE PANORAMIC TELESCOPE, USING THE ALIGNMENT DEVICE			X			2	Sgt	3-IIIF-32
29)	0811.02.31	ADJUST THE EQUILIBRATORS			X			3	Cpl	3-IIIF-32
30)	0811.02.32	PERFORM FIRE CONTROL ALIGNMENT TESTS			X			3	Sgt	3-IIIF-33
32)	0811.02.34	BORE SIGHT THE M137 PANORAMIC TELESCOPE USING A DISTANT AIMING POINT (DAP)			X			2	Sgt	3-IIIF-34

DUTY AREA 03 - SECTION CHIEF

1)	0811.03.01	PREPARE A HOWITZER FOR FIRING			X			2	SSgt	3-IIIF-34
2)	0811.03.02	MEASURE THE ANGLE OF SITE TO CREST AND THE PIECE TO CREST RANGE			X			2	SSgt	3-IIIF-35
3)	0811.03.04	DETERMINE WHETHER A HOWITZER IS SAFE TO FIRE			X			2	SSgt	3-IIIF-36
4)	0811.03.05	COMPUTE DATA FOR SWEEP AND ZONE FIRE MISSION			X			6	SSgt	3-IIIF-37
5)	0811.03.06	ISSUE FIRE COMMAND FOR DIRECT FIRE MISSION			X			2	SSgt	3-IIIF-37
6)	0811.03.07	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON A 5-TON TRUCK			X			1	SSgt	3-IIIF-38
7)	0811.03.10	PREPARE A HOWITZER SECTION FOR HELICOPTER DISPLACEMENT			X			6	SSgt	3-IIIF-39
8)	0811.03.12	SUPERVISE DIRECT FIRE, USING THE TWO-MAN TWO-SIGHT TECHNIQUE (M198)			X			6	SSgt	3-IIIF-39
9)	0811.03.14	SUPERVISE DIRECT FIRE, USING THE ONE-MAN ONE-SIGHT TECHNIQUE			X			6	SSgt	3-IIIF-39
10)	0811.03.15	PREPARE A HOWITZER FOR TRAVEL			X			2	SSgt	3-IIIF-41
11)	0811.03.16	PREPARE A HOWITZER TO SHOOT OUT OF NORMAL TRAVERSE LIMITS			X			2	SSgt	3-IIIF-41
12)	0811.03.17	SUPERVISE THE PREPARATION OF A PROJECTILE FOR FIRING			X			2	SSgt	3-IIIF-42
13)	0811.03.18	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE HOWITZER			X			1	SSgt	3-IIIF-42
14)	0811.03.19	VERIFY FIRE CONTROL ALIGNMENT TESTS			X			3	SSgt	3-IIIF-43
15)	0811.03.20	VERIFY MAINTENANCE ON THE BREECH MECHANISM AND THE COUNTERBALANCE			X			3	SSgt	3-IIIF-43
16)	0811.03.21	PREPARE THE HOWITZER FOR EXTERNAL HELICOPTER LIFT			X			6	SSgt	3-IIIF-44

DUTY AREA 04 - PLATOON SERGEANT/LOCAL SECURITY CHIEF

1)	0811.04.01	CONDUCT BATTERY CREW SERVED WEAPONS TRAINING			X			2	SSgt	3-IIIF-44
12)	0811.04.12	CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION			X	X		2	SSgt	3-IIIF-51
13)	0811.04.13	PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS			X			6	SSgt	3-IIIF-53
14)	0811.04.14	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS			X			6	SSgt	3-IIIF-54
15)	0811.04.15	PERFORM SHELL FRAGMENT ANALYSIS			X			6	SSgt	3-IIIF-55
16)	0811.04.16	ESTABLISH AN ADVANCE PARTY			X			2	SSgt	3-IIIF-56
17)	0811.04.17	PLAN THE DEFENSE OF A FIELD ARTILLERY UNIT			X			2	SSgt	3-IIIF-56

DUTY AREA 05 - BATTERY GUNNERY SERGEANT

1)	0811.05.01	EMPLOY THE HASTY SURVEY TECHNIQUES FOR DIRECTIONAL AND POSITIONAL CONTROL			X	X		2	GySgt	3-IIIF-57
5)	0811.05.05	UPDATE UNIT COMMANDER'S RECORD (NAVMC 10558A)			X			2	GySgt	3-IIIF-60

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
6)	0811.05.06	DIRECT THE DEFENSE OF A FIELD ARTILLERY UNIT			X		2	GySgt		3-IIIF-60
7)	0811.05.07	SUPERVISE A BATTERY DISPLACEMENT			X		2	GySgt		3-IIIF-61
8)	0811.05.08	SUPERVISE A TACTICAL ROAD MARCH			X	X	2	GySgt		3-IIIF-62
9)	0811.05.09	DIRECT ORGANIZATIONAL MAINTENANCE ON ORGANIC EQUIPMENT			X		2	GySgt		3-IIIF-63
10)	0811.05.10	COORDINATE LOGISTICS			X		2	GySgt		3-IIIF-64
13)	0811.05.13	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA			X	X	6	GySgt		3-IIIF-65
14)	0811.05.14	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	GySgt		3-IIIF-66
15)	0811.05.15	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	GySgt		3-IIIF-67
16)	0811.05.16	SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR A NUCLEAR ATTACK			X	X	6	GySgt		3-IIIF-68
17)	0811.05.17	SUPERVISE EMBARKATION			X		6	GySgt		3-IIIF-69
19)	0811.05.19	DIRECT SUSTAINMENT AND/OR SKILL PROGRESSION TRAINING FOR THE BATTERY			X	X	1	GySgt		3-IIIF-70
21)	0811.05.21	SUPERVISE BATTERY CREW SERVED WEAPONS TRAINING			X		2	GySgt		3-IIIF-73

DUTY AREA 06 - M101A1 HOWITZER

9)	0811.06.09	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE M101A1 HOWITZER			X		2	Pvt		3-IIIF-77
10)	0811.06.10	VERIFY PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)			X		2	Cpl		3-IIIF-78
29)	0811.06.29	SUPERVISE DIRECT FIRE WITH THE M101A1 HOWITZER			X		2	SSgt		3-IIIF-87

MOS 0840, NAVAL SURFACE FIRE SUPPORT PLANNER

DUTY AREA 01 - NAVAL GUNFIRE PLANNING OPERATIONS

1)	0840.01.02	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE GENERAL MISSION AND CHARACTERISTICS OF NAVAL GUNFIRE (NGF) EMPLOYED IN AN AMPHIBIOUS OPERATION	X	X	X		6	Capt		3-IVF-1
2)	0840.01.03	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE CONSIDERATIONS OF EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT FOR AN AMPHIBIOUS OPERATION	X	X	X		6	Capt		3-IVF-1
3)	0840.01.04	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND THE COMMANDER LANDING FORCE (CLF) ON THE ORGANIZATION FOR COMMAND, CONTROL AND EMPLOYMENT OF NAVAL GUNFIRE (NGF) SUPPORT PLANNING FOR AN AMPHIBIOUS OPERATION	X	X	X		6	Capt		3-IVF-2
4)	0840.01.05	PREPARE AND BRIEF A NAVAL GUNFIRE (NGF) ESTIMATE OF SUPPORTABILITY	X	X	X		3	Capt		3-IVF-3
5)	0840.01.06	PREPARE AND BRIEF AN OVERALL NAVAL GUNFIRE (NGF) SUPPORT REQUIREMENTS LETTER	X	X	X		3	Capt		3-IVF-4
6)	0840.01.07	PREPARE AND BRIEF A DETAILED NAVAL GUNFIRE (NGF) SUPPORT REQUIREMENTS LETTER	X	X	X		3	Capt		3-IVF-5
7)	0840.01.08	BRIEF THE COMMANDER OF THE AMPHIBIOUS TASK FORCE (CATF) AND COMMANDER LANDING FORCE (CLF) ON NAVAL GUNFIRE (NGF) AND GENERAL FIRE SUPPORT COORDINATION TECHNIQUES TO BE EMPLOYED DURING THE ASHORE PHASE OF THE OPERATION	X	X	X		3	Capt		3-IVF-6

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
8)	0840.01.09	WRITE A NAVAL GUNFIRE (NGF) SUPPORT PLAN TAB TO AN OPERATIONS PLAN/ORDER	X	X	X		3	Capt		3-IVF-7
DUTY AREA 02 - FIRE SUPPORT COORDINATION CENTER (FSCC) OPERATIONS										
1)	0840.02.01	INFORM SUPPORTED MANEUVER COMMANDER OF THE NAVAL GUNFIRE (NGF) TACTICAL MISSIONS AND CORRESPONDING PLAN TO SUPPORT THE SCHEME OF MANEUVER	X	X	X		3	Capt		3-IVF-8
2)	0840.02.02	BRIEF A MANEUVER COMMANDER ON THE FIRE SUPPORT PLAN			X		3	Capt		3-IVF-8
3)	0840.02.03	ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)	X	X	X		3	Capt		3-IVF-9
MOS 0842, FIELD ARTILLERY RADAR OPERATOR										
DUTY AREA 01 - COMMUNICATIONS										
1)	0842.01.01	ESTABLISH, ENTER, AND LEAVE A RADIO NET	X	X	X		3	Pvt		3-VF-1
3)	0842.01.03	PREPARE AND OPERATE SINCGARS SERIES RADIOS	X	X	X		3	Pvt		3-VF-2
DUTY AREA 05 - PREVENTIVE MAINTENANCE CHECKS AND SERVICES										
1)	0842.05.01	PERFORM OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON THE RADAR SET AN/TPQ-46	X	X	X		3	Pvt		3-VF-13
2)	0842.05.02	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON GENERATOR SET MEP-813A	X	X	X		3	Pvt		3-VF-13
3)	0842.05.03	PERFORM OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON SINCGARS SERIES RADIO	X	X	X		3	Pvt		3-VF-13
MOS 0844, FIELD ARTILLERY FIRE CONTROL MAN										
DUTY AREA 12 - SURVEY										
1)	0844.12.01	MEASURE DISTANCES WITH THE DISTOMAT DI-3000		X	X		2	Pvt		3-VIF-17
2)	0844.12.02	PERFORM DI-3000 (DISTOMAT)/THEODOLITE PARALLELISM TEST AND ADJUSTMENT		X	X		6	Cpl		3-VIF-18
3)	0844.12.03	MEASURE A HORIZONTAL AND VERTICAL ANGLE WITH A T-2E THEODOLITE		X	X		2	Pvt		3-VIF-18
4)	0844.12.04	MAKE OBSERVATIONS FOR THE ARTY ASTRO METHOD		X	X		2	Pvt		3-VIF-19
5)	0844.12.05	PERFORM THEODOLITE TEST AND ADJUSTMENTS		X	X		6	Cpl		3-VIF-19
6)	0844.12.06	PERFORM MAINTENANCE ON A T-2E THEODOLITE		X	X		6	Cpl		3-VIF-20
7)	0844.12.07	RECORD FIELD NOTES FOR A HORIZONTAL AND VERTICAL ANGLE		X	X		2	Pvt		3-VIF-20
8)	0844.12.08	RECORD FIELD NOTES FOR ASTRONOMIC OBSERVATIONS		X	X		2	Pvt		3-VIF-21
9)	0844.12.09	RECORD FIELD NOTES FOR THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)		X	X		2	Pvt		3-VIF-21
10)	0844.12.10	PERFORM COMPUTATIONS OF AZIMUTHS AND DISTANCES FROM COORDINATES		X	X		2	Pvt		3-VIF-22
11)	0844.12.11	PERFORM CONVERSION AND TRANSFORMATION OF COORDINATES AND AZIMUTH		X	X		2	Pvt		3-VIF-23
12)	0844.12.12	PERFORM COMPUTATIONS OF UNIVERSAL TRAVERSE MERCATOR (UTM) CONVERGENCE		X	X		2	Pvt		3-VIF-23
13)	0844.12.13	PERFORM TRIG TRAVERSE COMPUTATIONS		X	X		2	Pvt		3-VIF-24
14)	0844.12.14	PERFORM TRAVERSE COMPUTATIONS		X	X		2	Pvt		3-VIF-24
15)	0844.12.15	PERFORM COMPUTATIONS OF ASTRONOMIC OBSERVATIONS		X	X		2	Pvt		3-VIF-25
16)	0844.12.16	PERFORM INTERSECTION COMPUTATIONS		X	X		2	Pvt		3-VIF-25
17)	0844.12.17	PERFORM THREE POINT RESECTION COMPUTATIONS		X	X		2	Pvt		3-VIF-25

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
18)	0844.12.18	PERFORM DATUM TO DATUM TRANSFORMATION COMPUTATIONS		X	X		2	Pvt		3-VIF-26
19)	0844.12.19	IDENTIFY STARS FOR ASTRONOMIC OBSERVATION		X	X		2	Pvt		3-VIF-26
20)	0844.12.20	INITIALIZE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)		X	X		2	Pvt		3-VIF-27
21)	0844.12.21	UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB OVER A SURVEY CONTROL POINT (SCP)		X	X		2	Pvt		3-VIF-28
22)	0844.12.22	UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE OVER A SURVEY CONTROL POINT (SCP) (AUTOREFLECTION)		X	X		2	Pvt		3-VIF-28
23)	0844.12.23	UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH PLUMB BOB OVER A STATION LOCATED BY GLOBAL POSITIONING SYSTEM (GPS)		X	X	X	2	Pvt		3-VIF-29
24)	0844.12.24	PERFORM A TWO POSITION MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB		X	X		2	Pvt		3-VIF-30
25)	0844.12.25	PERFORM A MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE		X	X		2	Pvt		3-VIF-30
26)	0844.12.26	PERFORM AN OPTICAL AZIMUTH MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE		X	X		2	Pvt		3-VIF-31
27)	0844.12.27	EXTRACT ADJUSTED DATA FROM THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)		X	X		2	Pvt		3-VIF-31
28)	0844.12.28	PERFORM OPERATOR'S MAINTENANCE ON THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)		X	X		2	Pvt		3-VIF-32
29)	0844.12.29	PERFORM CONVERSION TO COMMON CONTROL PROCEDURES		X	X		2	Pvt		3-VIF-32
30)	0844.12.30	MARK SURVEY STATIONS		X	X		2	Pvt		3-VIF-33
31)	0844.12.31	DECLINATE AN M2A2 AIMING CIRCLE		X	X	X	2	Pvt		3-VIF-33
32)	0844.12.32	DETERMINE A GRID AZIMUTH WITH A DECLINATED M2A2 AIMING CIRCLE		X	X	X	2	Pvt		3-VIF-34
33)	0844.12.33	PERFORM CRATER ANALYSIS WITH AN M2A2 AIMING CIRCLE		X	X		6	Cpl		3-VIF-34
34)	0844.12.34	PERFORM SHELL FRAGMENT ANALYSIS		X	X		6	Cpl		3-VIF-35
35)	0844.12.35	PERFORM OPERATOR'S MAINTENANCE ON AN M2A2 AIMING CIRCLE		X	X		6	Cpl		3-VIF-36
36)	0844.12.36	CONDUCT AN ADJUST FIRE MISSION		X	X	X	6	LCpl		3-VIF-36
37)	0844.12.37	CONDUCT AN IMMEDIATE SUPPRESSION MISSION		X	X	X	6	LCpl		3-VIF-37
38)	0844.12.38	UPDATE THE EMPHEMERIS FILE IN GP SURVEY		X	X		2	Pvt		3-VIF-38
39)	0844.12.39	PRINT GLOBAL POSITIONING SYSTEM (GPS) OBSERVATION WINDOWS USING PLANNING SOFTWARE		X	X		2	Pvt		3-VIF-38
40)	0844.12.40	ESTABLISH AN ABSOLUTE POINT		X	X		2	Pvt		3-VIF-39
41)	0844.12.41	PERFORM A REAL TIME KINEMATIC-ON THE FLY (RTK/OTF) SURVEY		X	X		2	Pvt		3-VIF-39
42)	0844.12.42	PERFORM DATUM TRANSFORMATIONS WITH THE TDC2M		X	X		2	Pvt		3-VIF-40
43)	0844.12.43	PERFORM A FAST STATIC, STATIC, AND KINEMATIC SURVEY		X	X		2	Pvt		3-VIF-40
44)	0844.12.44	POST PROCESSED DATA FROM A FAST STATIC, STATIC, AND KINEMATIC NETWORK SURVEY		X	X		2	Cpl		3-VIF-40
45)	0844.12.45	ADJUST A FAST STATIC, STATIC, AND KINEMATIC SURVEY NETWORK		X	X		2	Cpl		3-VIF-41
46)	0844.12.46	DETERMINE USER DEFINED DATA AND ELLIPSOID DATUM		X	X		2	Pvt		3-VIF-41
47)	0844.12.47	CONDUCT RECONNAISSANCE FOR ARTILLERY UNITS		X	X	X	2	Sgt		3-VIF-42
DUTY AREA 21 - TARGET PRODUCTION CENTER OPERATIONS										
1)	0844.21.01	PREPARE/MAINTAIN A TARGET PRODUCTION MAP AND OVERLAYS			X		2	PFC		3-VIF-59
2)	0844.21.02	PREPARE/MAINTAIN THE TARGET CARD FILE			X		2	PFC		3-VIF-59

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
3)	0844.21.03	EVALUATE TARGETING INFORMATION			X		2	Cpl		3-VIF-30
4)	0844.21.04	MONITOR THE OPERATION OF ALL COUNTERBATTERY RADAR (CBR) PLATOON ASSETS			X		2	Sgt		3-VIF-61
5)	0844.21.05	RECOMMEND COVERAGE OF THE AREA OF OPERATIONS BY COUNTERBATTERY RADAR (CBR) ASSETS			X		2	Sgt		3-VIF-61

MOS 0845, NAVAL GUNFIRE SPOTTER

DUTY AREA 01 - NAVAL GUNFIRE SPOTTING OPERATIONS

1)	0845.01.01	SUPERVISE THE EMPLOYMENT OF A NAVAL GUNFIRE (NGF) SPOT TEAM			X		2	2ndLt		3-VIIF-1
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DUTY AREA 02 - NGF SPOTTING PROCEDURES

1)	0845.02.01	LOCATE A TARGET BY GRID COORDINATES	X	X	X		2	2ndLt		3-VIIF-2
2)	0845.02.02	LOCATE A TARGET BY POLAR PLOT	X	X	X		2	2ndLt		3-VIIF-2
3)	0845.02.03	LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	X	X	X		2	2ndLt		3-VIIF-4
4)	0845.02.04	MEASURE ANGULAR DEVIATION WITH YOUR HAND	X	X	X		2	2ndLt		3-VIIF-3
5)	0845.02.05	CONDUCT AN ADJUST FIRE MISSION	X	X	X		2	2ndLt		3-VIIF-4
7)	0845.02.07	CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-5
8)	0845.02.08	CONDUCT A DANGER CLOSE FIRE MISSION	X	X	X	X	2	2ndLt		3-VIIF-6
9)	0845.02.09	REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-7
10)	0845.02.10	CONDUCT AN ILLUMINATION MISSION	X	X	X	X	2	2ndLt		3-VIIF-7
11)	0845.02.11	CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-8
12)	0845.02.12	CONDUCT SIMULTANEOUS MISSIONS WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-9
13)	0845.02.13	CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X	X	X	2	2ndLt		3-VIIF-9
15)	0845.02.15	OPERATE AN AN/PRC-104 RADIO SET	X	X	X		2	2ndLt		3-VIIF-11
16)	0845.02.16	INSTALL AN/MRC-138 RADIO SET			X		3	2ndLt		3-VIIF-11
17)	0845.02.17	OPERATE AN AN/MRC-138 RADIO SET			X		3	2ndLt		3-VIIF-12
18)	0845.02.18	PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET			X		2	2ndLt		3-VIIF-12
20)	0845.02.20	MAINTAIN COMMUNICATIONS EQUIPMENT	X	X	X		2	2ndLt		3-VIIF-13
24)	0845.02.24	OPERATE THE AN/PRC-119	X	X	X		2	2ndLt		3-VIIF-15
25)	0845.02.25	SELECT AND OCCUPY AN OBSERVATION POST (OP)	X	X	X		2	2ndLt		3-VIIF-16
27)	0845.02.27	PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	X	X	X		2	2ndLt		3-VIIF-17
28)	0845.02.28	DETERMINE DIRECTION TO TWO TARGETS	X	X	X		2	2ndLt		3-VIIF-18
29)	0845.02.29	CONSTRUCT A TERRAIN SKETCH	X	X	X		2	2ndLt		3-VIIF-18
30)	0845.02.30	CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION	X	X	X	X	2	2ndLt		3-VIIF-19

DUTY AREA 04 - MAP READING AND LAND NAVIGATION

1)	0845.04.01	DECLINATE AN M2 COMPASS USING THE FIELD EXPEDIENT METHOD	X	X	X		2	2ndLt		3-VIIF-21
2)	0845.04.02	ORIENT A MAP USING A DECLINATED M2 COMPASS (CORE)	X	X	X		2	2ndLt		3-VIIF-22
3)	0845.04.03	LOCATE YOUR POSITION DURING A TERRAIN WALK	X	X	X		2	2ndLt		3-VIIF-22
4)	0845.04.04	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED			X		2	2ndLt		3-VIIF-22
5)	0845.04.05	LOCATE POSITIONS IN A MOBILE ENVIRONMENT	X	X	X		2	2ndLt		3-VIIF-23
11)	0845.04.11	LOCATE POSITION ON A MAP OR GROUND BY RESECTION	X	X	X		2	2ndLt		3-VIIF-26
12)	0845.04.12	DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP	X	X	X		2	2ndLt		3-VIIF-27

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
13)	0845.04.13	DETERMINE A POSITION WITH THE AN/PSN-11 (PLGR) IN THE AVERAGING MODE	X	X	X	X	2	2ndLt		3-VIIF-28
14)	0845.04.14	PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)	X	X	X	X	2	2ndLt		3-VIIF-29

MOS 0847, ARTILLERY METEOROLOGICAL MAN

DUTY AREA 01 - METEOROLOGICAL GENERAL

19)	0847.01.19	PREPARE A LOADING PLAN FOR A METEOROLOGICAL (MET) SECTION			X		3	Sgt		3-VIIIF-11
22)	0847.01.22	PERFORM OPERATOR'S MAINTENANCE CHECKS AND SERVICES ON METEOROLOGICAL EQUIPMENT	X	X	X		3	Pvt		3-VIIIF-12

MOS 0848, FIELD ARTILLERY OPERATIONS MAN

DUTY AREA 01 - FIRE DIRECTION CENTER (FDC) GENERAL

11)	0848.01.11	SUPERVISE THE MAINTENANCE OF FIRE DIRECTION EQUIPMENT			X		2	SSgt		3-IXF-5
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DUTY AREA 13 - SURVEY

1)	0848.13.01	VERIFY MEASURE DISTANCES WITH THE DISTOMAT DI-3000	X	X	X		2	SSgt		3-IXF-41
2)	0848.13.02	VERIFY DI-3000 DISTOMAT/THEODOLITE PARALLELISM TEST AND ADJUSTMENT	X	X	X		6	SSgt		3-IXF-42
3)	0848.13.03	SUPERVISE THE MEASURING OF A HORIZONTAL AND VERTICAL ANGLE WITH A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-42
4)	0848.13.04	SUPERVISE OBSERVATIONS FOR THE ARTY ASTRO METHOD	X	X	X		2	SSgt		3-IXF-43
5)	0848.13.05	SUPERVISE THEODOLITE TEST AND ADJUSTMENTS	X	X	X		6	SSgt		3-IXF-43
6)	0848.13.06	SUPERVISE THE MAINTENANCE ON A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-44
7)	0848.13.07	VERIFY THE RECORDED FIELD NOTES FOR A HORIZONTAL AND VERTICAL ANGLE	X	X	X		2	SSgt		3-IXF-44
8)	0848.13.08	VERIFY THE RECORDED FIELD NOTES FOR ASTRONOMIC OBSERVATIONS	X	X	X		2	SSgt		3-IXF-45
9)	0848.13.09	VERIFY THE RECORDED FIELD NOTES FOR THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-45
10)	0848.13.10	SUPERVISE THE COMPUTATIONS OF AZIMUTHS AND DISTANCES FROM COORDINATES	X	X	X		2	SSgt		3-IXF-46
11)	0848.13.11	VERIFY THE CONVERSION AND TRANSFORMATION OF COORDINATES AND AZIMUTH	X	X	X		2	SSgt		3-IXF-46
13)	0848.13.13	VERIFY TRIG TRAVERSE COMPUTATIONS	X	X	X		2	SSgt		3-IXF-47
14)	0848.13.14	VERIFY TRAVERSE COMPUTATIONS	X	X	X		2	SSgt		3-IXF-48
15)	0848.13.15	VERIFY COMPUTATIONS OF ASTRONOMIC OBSERVATIONS	X	X	X		2	SSgt		3-IXF-48
16)	0848.13.16	VERIFY INTERSECTION COMPUTATIONS	X	X	X		2	SSgt		3-IXF-49
17)	0848.13.17	VERIFY THREE POINT RESECTION COMPUTATIONS	X	X	X		2	SSgt		3-IXF-49
18)	0848.13.18	PERFORM DATUM TO DATUM TRANSFORMATION COMPUTATIONS	X	X	X		2	SSgt		3-IXF-50
19)	0848.13.19	SUPERVISE THE SELECTION AND IDENTIFICATION OF STARS FOR ASTRONOMIC OBSERVATION	X	X	X		2	SSgt		3-IXF-50
20)	0848.13.20	VERIFY THE INITIALIZATION OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-51
21)	0848.13.21	SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB OVER A SURVEY CONTROL POINT (SCP)	X	X	X		2	SSgt		3-IXF-52

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
22)	0848.13.22	SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE OVER A SURVEY CONTROL POINT (SCP) (AUTOREFLECTION)	X	X	X		2	SSgt		3-IXF-52
23)	0848.13.23	SUPERVISE THE UPDATE OF THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH PLUMB BOB OVER A STATION LOCATED BY GLOBAL POSITIONING SYSTEM (GPS)	X	X	X		2	SSgt		3-IXF-53
24)	0848.13.24	SUPERVISE THE PERFORMANCE OF A TWO POSITION MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A PLUMB BOB	X	X	X		2	SSgt		3-IXF-54
25)	0848.13.25	SUPERVISE THE PERFORMANCE OF A MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-54
26)	0848.13.26	SUPERVISE THE PERFORMANCE OF AN OPTICAL AZIMUTH MARK WITH THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH A T-2E THEODOLITE	X	X	X		2	SSgt		3-IXF-55
27)	0848.13.27	SUPERVISE THE EXTRACTION OF ADJUSTED DATA FROM THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-55
28)	0848.13.28	SUPERVISE THE PERFORMANCE OF OPERATOR MAINTENANCE ON THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS)	X	X	X		2	SSgt		3-IXF-56
29)	0848.13.29	SUPERVISE THE CONVERSION TO COMMON CONTROL PROCEDURES	X	X	X		2	SSgt		3-IXF-56
30)	0848.13.30	SUPERVISE THE MARKING OF SURVEY STATIONS	X	X	X		2	SSgt		3-IXF-57
31)	0848.13.31	SUPERVISE THE DECLINATION OF AN M2A2 AIMING CIRCLE	X	X	X		2	SSgt		3-IXF-57
32)	0848.13.32	VERIFY THE DETERMINATION OF A GRID AZIMUTH WITH A DECLINATED M2A2 AIMING CIRCLE	X	X	X		2	SSgt		3-IXF-58
34)	0848.13.34	SUPERVISE THE PERFORMANCE OF SHELL FRAGMENT ANALYSIS	X	X	X		6	SSgt		3-IXF-59
35)	0848.13.35	SUPERVISE THE PERFORMANCE OF OPERATOR'S MAINTENANCE ON AN M2A2 AIMING CIRCLE	X		X		2	SSgt		3-IXF-60
36)	0848.13.36	SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION	X	X	X	X	2	SSgt		3-IXF-60
37)	0848.13.37	SUPERVISE THE CONDUCT OF AN IMMEDIATE SUPPRESSION MISSION	X	X	X	X	2	SSgt		3-IXF-61
38)	0848.13.38	SUPERVISE THE UPDATE OF THE EMPHEMERIS FILE IN GLOBAL POSITIONING SYSTEM (GPS) SURVEY	X	X	X		2	SSgt		3-IXF-61
39)	0848.13.39	SUPERVISE THE PRINTING OF GLOBAL POSITIONING SYSTEM (GPS) OBSERVATION WINDOWS USING PLANNING SOFTWARE	X	X	X		2	SSgt		3-IXF-62
40)	0848.13.40	SUPERVISE THE ESTABLISHMENT OF AN ABSOLUTE POINT	X	X	X		2	SSgt		3-IXF-62
41)	0848.13.41	SUPERVISE THE PERFORMANCE OF A REAL TIME KINEMATIC/ON THE FLY (RTK/OTF) SURVEY	X	X	X		2	SSgt		3-IXF-63
42)	0848.13.42	SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS WITH THE TDC2M	X	X	X		2	SSgt		3-IXF-63
43)	0848.13.43	SUPERVISE THE PERFORMANCE OF A FAST STATIC, STATIC, AND KINEMATIC SURVEY	X	X	X		2	SSgt		3-IXF-64
44)	0848.13.44	SUPERVISE THE POSTING OF PROCESS DATA FROM A FAST STATIC, STATIC, AND KINEMATIC NETWORK SURVEY	X	X	X		2	SSgt		3-IXF-64
45)	0848.13.45	SUPERVISE THE ADJUSTMENT OF A FAST STATIC, STATIC, AND KINEMATIC SURVEY NETWORK	X	X	X		2	SSgt		3-IXF-64
46)	0848.13.46	VERIFY THE DETERMINATION OF USER DEFINED DATA AND ELLIPSOID DATUM	X	X	X		2	SSgt		3-IXF-65
47)	0848.13.47	SUPERVISE RECONNAISSANCE FOR ARTILLERY UNITS	X	X	X	X	2	SSgt		3-IXF-65

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 28 - OPERATIONS OF RADAR SET AN/TPQ-46										
2)	0848.28.02	SUPERVISE VOICE AND DIGITAL COMMUNICATIONS	X	X	X		3	SSgt		3-IXF-94
3)	0848.28.03	SUPERVISE OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) ON RADAR SET AN/TPQ-46	X	X	X		3	SSgt		3-IXF-95
DUTY AREA 29 - TARGET PROCESSING										
1)	0848.29.01	SUPERVISE THE RECORDING, PROCESSING, AND ROUTING OF ALL HOSTILE WEAPON LOCATIONS			X		3	SSgt		3-IXF-96
2)	0848.29.02	SUPERVISE MAINTENANCE OF THE TARGET PRODUCTION MAP			X		3	SSgt		3-IXF-97
3)	0848.29.03	SUPERVISE THE TARGET PROCESSING SECTION DURING COMBAT OPERATIONS			X		3	SSgt		3-IXF-97
DUTY AREA 30 - METEOROLOGICAL										
4)	0848.30.04	SUPERVISE MAINTENANCE OF METEOROLOGICAL EQUIPMENT	X	X	X		3	SSgt		3-IXF-100
6)	0848.30.06	SUPERVISE THE LOADING, MOVEMENT, EMPLACEMENT, AND DESTRUCTION OF A METEOROLOGICAL SECTION	X	X	X		3	SSgt		3-IXF-101
DUTY AREA 37 - 81 MM MORTAR PLATOON OPERATIONS										
1)	0848.37.01	SET UP THE M16 PLOTTING BOARD FOR WEAPONS EQUIPPED WITH THE M64-SERIES SIGHT	X	X	X		2	SSgt		3-IXF-116
2)	0848.37.02	DETERMINE TERRAIN GUN POSITION CORRECTIONS			X		2	SSgt		3-IXF-116
3)	0848.37.03	DETERMINE SPECIAL CORRECTIONS			X		2	SSgt		3-IXF-117
4)	0848.37.04	DETERMINE HASTY SPECIAL CORRECTIONS			X		2	SSgt		3-IXF-118
5)	0848.37.05	DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF OFFENSIVE OPERATIONS			X		2	SSgt		3-IXF-118
6)	0848.37.06	DIRECT THE EMPLOYMENT OF A MORTAR SECTION/PLATOON IN SUPPORT OF DEFENSIVE OPERATIONS			X		2	SSgt		3-IXF-119
7)	0848.37.07	SELECT A MORTAR POSITION			X		2	SSgt		3-IXF-119
9)	0848.37.09	DIRECT FIRE DIRECTION CENTER (FDC) OPERATIONS			X		2	SSgt		3-IXF-120
10)	0848.37.10	DIRECT A MORTAR SECTION/PLATOON DISPLACEMENT			X		2	SSgt		3-IXF-112
MOS 0861, FIRE SUPPORT MAN										
DUTY AREA 01 - MAP READING AND M2 COMPASS										
1)	0861.01.01	DECLINATE AN M2 COMPASS USING THE FIELD EXPEDIENT METHOD	X	X	X		2	Pvt		3-XF-1
2)	0861.01.02	ORIENT A MAP USING A DECLINATED M2 COMPASS	X	X	X		2	Pvt		3-XF-1
3)	0861.01.03	LOCATE YOUR POSITION DURING A TERRAIN WALK	X	X	X		2	Pvt		3-XF-1
4)	0861.01.04	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X		2	Pvt		3-XF-2
5)	0861.01.05	LOCATE POSITIONS IN A MOBILE ENVIRONMENT	X	X	X		2	Pvt		3-XF-2
11)	0861.01.11	LOCATE POSITION ON A MAP OR GROUND BY RESECTION	X	X	X		2	Pvt		3-XF-6
12)	0861.01.12	DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP	X	X	X		2	Pvt		3-XF-6
15)	0861.01.15	CONDUCT BATTLEFIELD REPORTING			X	X	2	Pvt		3-XF-8

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 02 - COMMUNICATIONS										
1)	0861.02.01	ESTABLISH/ENTER AND LEAVE A RADIO TELEPHONE NET	X	X	X		2	Pvt		3-XF-9
2)	0861.02.02	ENCODE/DECODE/AUTHENTICATE USING THE NUMERAL CIPHER/AUTHENTICATION SYSTEM			X		2	Pvt		3-XF-10
3)	0861.02.04	SEND AND RECEIVE RADIO TRANSMISSIONS USING PROPER RADIO TELEPHONE PROCEDURES	X	X	X		2	Pvt		3-XF-10
6)	0861.02.07	OPERATE AN FM RADIO SET AN/PRC-119	X	X	X		2	Pvt		3-XF-12
7)	0861.02.08	INSTALL AN/VRC-88 RADIO SET			X		2	Pvt		3-XF-12
8)	0861.02.09	OPERATE A AN/VRC-88 RADIO SET			X		2	Pvt		3-XF-13
9)	0861.02.10	INSTALL AN/MRC-145 RADIO SET			X		2	Pvt		3-XF-13
10)	0861.02.11	OPERATE AN AN/MRC-145 RADIO SET			X		2	Pvt		3-XF-14
11)	0861.02.15	OPERATE AN AN/PRC-104 RADIO SET	X	X	X		2	Pvt		3-XF-14
12)	0861.02.16	INSTALL AN/MRC-138 RADIO SET			X		2	Pvt		3-XF-15
13)	0861.02.17	OPERATE AN AN/MRC-138 RADIO SET			X		2	Pvt		3-XF-16
14)	0861.02.18	PREPARE/OPERATE TSEC/KY-99 COMMUNICATIONS SECURITY EQUIPMENT WITH AN AM RADIO SET			X		2	Pvt		3-XF-16
15)	0861.02.19	ERECT OE-254 ANTENNA	X	X	X		2	Pvt		3-XF-17
16)	0861.02.20	INSTALL AND OPERATE RADIO SET CONTROL GROUP AN/GRA-39 AND/OR AN/PRC-119C FOR REMOTE OPERATION	X	X	X		2	Pvt		3-XF-18
17)	0861.02.21	OPERATE AND MAINTAIN A FIELD PHONE			X		2	Pvt		3-XF-19
19)	0861.02.23	MAINTAIN COMMUNICATIONS EQUIPMENT	X	X	X		2	Pvt		3-XF-21
20)	0861.02.24	IDENTIFY ELECTRONIC COUNTERMEASURES (ECM) AND IMPLEMENT ELECTRONIC COUNTER-COUNTERMEASURES (ECCM)			X		2	Pvt		3-XF-21
21)	0861.02.25	PREPARE/SUBMIT OPERATOR'S MEACONING, INTRUSION, JAMMING, AND INTERFERENCE (MIJI) REPORT			X		2	Pvt		3-XF-22
DUTY AREA 03 - OBSERVED FIRE PROCEDURES										
1)	0861.03.01	SELECT AN OBSERVATION POST AND PREPARE TO USE IT	X	X	X		2	Pvt		3-XF-23
3)	0861.03.03	PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	X	X	X		2	Pvt		3-XF-24
4)	0861.03.04	DETERMINE DIRECTION TO TWO TARGETS	X	X	X		2	Pvt		3-XF-24
5)	0861.03.05	CONSTRUCT A TERRAIN SKETCH	X	X	X		2	Pvt		3-XF-25
6)	0861.03.06	PREPARE A VISIBILITY DIAGRAM			X		2	Pvt		3-XF-25
7)	0861.03.07	LOCATE A TARGET BY GRID COORDINATES	X	X	X		2	Pvt		3-XF-26
8)	0861.03.08	LOCATE A TARGET BY POLAR PLOT	X	X	X		2	Pvt		3-XF-26
9)	0861.03.09	LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	X	X	X		2	Pvt		3-XF-27
10)	0861.03.10	MEASURE ANGULAR DEVIATION WITH YOUR HAND	X	X	X		2	Pvt		3-XF-28
11)	0861.03.11	CONDUCT AN ADJUST FIRE MISSION	X	X	X	X	2	Pvt		3-XF-28
14)	0861.03.14	PERFORM PREVENTIVE MAINTENANCE CHECKS AND SERVICES ON AN/GVS-5 LASER RANGE FINDER	X	X	X		2	Pvt		3-XF-30
17)	0861.03.17	CONDUCT A SUPPRESSION MISSION ON A PLANNED TARGET		X	X	X	2	Pvt		3-XF-32
18)	0861.03.18	CONDUCT AN IMMEDIATE SUPPRESSION MISSION	X	X	X		2	Pvt		3-XF-33
19)	0861.03.19	CONDUCT A FIRE FOR EFFECT (FFE) MISSION	X	X	X		2	Pvt		3-XF-34
20)	0861.03.20	CONDUCT AN ILLUMINATION MISSION	X	X	X		2	Pvt		3-XF-34
21)	0861.03.21	CONDUCT A COORDINATED ILLUMINATION MISSION	X	X	X		2	Pvt		3-XF-35
22)	0861.03.22	CONDUCT A FASCAM MISSION			X		2	Pvt		3-XF-36
23)	0861.03.23	CONDUCT A DPICM MISSION			X		2	Pvt		3-XF-36
24)	0861.03.24	CONDUCT A DANGER CLOSE FIRE MISSION	X	X	X		2	Pvt		3-XF-37
26)	0861.03.27	ADJUST FINAL PROTECTIVE FIRES			X		2	Pvt		3-XF-38
27)	0861.03.28	CONDUCT AN IMMEDIATE SMOKE MISSION	X	X	X		2	Pvt		3-XF-39
28)	0861.03.29	CONDUCT A QUICK SMOKE MISSION	X	X	X		2	Pvt		3-XF-40
32)	0861.03.33	CONDUCT A PRECISION REGISTRATION, QUICK AND TIME	X	X	X		2	Pvt		3-XF-43
33)	0861.03.34	CONDUCT A HIGH-BURST OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION	X	X	X		2	Pvt		3-XF-44
34)	0861.03.35	CONDUCT AN ABBREVIATED REGISTRATION	X	X	X		2	Pvt		3-XF-45
40)	0861.03.42	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE			X	X	2	Pvt		3-XF-49

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
42)	0861.03.44	CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION	X	X	X	X	2	Pvt		3-XF-51
51)	0861.03.53	CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION	X	X	X	X	2	Pvt		3-XF-56
DUTY AREA 04 - FIRE SUPPORT PLANNING AND COORDINATION										
7)	0861.04.07	ADVISE THE SUPPORTED UNIT OF FRIENDLY AND ENEMY FIRE SUPPORT CAPABILITIES AND LIMITATIONS		X	X		2	Sgt		3-XF-60
10)	0861.04.10	LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM				X	2	Cpl		3-XF-62
11)	0861.04.12	EVALUATE TARGETING INFORMATION				X	2	Cpl		3-XF-62
22)	0861.04.23	ADVISE THE MANEUVER COMMANDER ON EMPLOYMENT OF AVAILABLE TARGET ACQUISITION ASSETS, THEIR CAPABILITIES, AND LIMITATIONS		X	X		2	Sgt		3-XF-69
24)	0861.04.25	PLAN FIRE SUPPORT FOR OFFENSIVE OPERATIONS		X	X		2	Sgt		3-XF-70
25)	0861.04.26	PLAN FIRE SUPPORT FOR DEFENSIVE OPERATIONS		X	X		2	Sgt		3-XF-71
26)	0861.04.27	INTEGRATE COMPANY ORGANIC INDIRECT FIRE WEAPONS INTO FIRE PLANS				X	2	LCpl		3-XF-72
DUTY AREA 05 - COUNTERFIRE										
1)	0861.05.01	PERFORM CRATER ANALYSIS FOR LOW-ANGLE CRATERS				X	6	Pvt		3-XF-74
2)	0861.05.02	PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE DELAY CRATERS				X	6	Pvt		3-XF-75
3)	0861.05.03	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS				X	6	Pvt		3-XF-76
4)	0861.05.04	PERFORM SHELL FRAGMENT ANALYSIS				X	6	Pvt		3-XF-76
5)	0861.05.05	PREPARE/SUBMIT STANDARD SHELLING, MORTARING, AND BOMBING REPORT				X	X	6	Pvt	3-XF-77
DUTY AREA 07 - OBSERVER DIGITAL TERMINAL (ODT)										
9)	0861.07.09	REPORT ENEMY ACTIVITY BY THE USE OF THE ARTILLERY TARGET INTELLIGENCE (ATI) MESSAGES WITH THE OBSERVER DIGITAL TERMINAL (ODT)				X	2	Pvt		3-XF-82
11)	0861.07.11	REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE OBSERVER DIGITAL TERMINAL (ODT)				X	2	Pvt		3-XF-83

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INDIVIDUAL TRAINING STANDARDS SUPPORTED BY PERFORMANCE SUPPORT TOOLS

This appendix includes a summary listing of all ITS tasks that have at least one currently available or planned performance support tool (PST) associated with them. They are grouped by MOS and Duty Area.

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
MOS 0802, FIELD ARTILLERY OFFICER										
DUTY AREA 01 - OBSERVED FIRE										
1)	0802.01.01	DIRECT THE OPERATIONS OF THE FORWARD IN OBSERVER (FO) TEAM	X	X	X	X	2	2ndLt	3-IF-1	
34)	0802.01.34	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE			X	X	2	2ndLt	3-IF-24	
35)	0802.01.35	CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION	X	X		X	2	2ndLt	3-IF-25	
DUTY AREA 03 - CANNON										
1)	0802.03.01	EMPLOY THE APPROPRIATE HASTY SURVEY TECHNIQUE FOR DIRECTIONAL AND POSITIONAL CONTROL	X	X	X	X	2	2ndLt	3-IF-33	
3)	0802.03.03	LAY THE FIRING BATTERY	X	X	X	X	2	2ndLt	3-IF-35	
6)	0802.03.06	DECLINATE THE AIMING CIRCLE	X	X	X	X	2	2ndLt	3-IF-37	
7)	0802.03.07	MEASURE THE ORIENTING ANGLE (OA)	X	X	X	X	2	2ndLt	3-IF-38	
8)	0802.03.08	MEASURE THE AZIMUTH OF THE LINE OF FIRE	X	X	X	X	2	2ndLt	3-IF-38	
10)	0802.03.10	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X	X	2	2ndLt	3-IF-40	
17)	0802.03.17	SET UP AND RECOVER THE M2A2 AIMING CIRCLE	X	X	X	X	2	2ndLt	3-IF-43	
20)	0802.03.20	LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY				X	2	2ndLt	3-IF-45	
DUTY AREA 04 - FIRE SUPPORT										
1)	0802.04.01	BRIEF THE MANEUVER COMMANDER ON EMPLOYMENT OF FIRE SUPPORT ASSETS	X	X		X	2	2ndLt	3-IF-47	
2)	0802.04.02	BRIEF A FIRE SUPPORT COORDINATOR (FSC) ON FIELD ARTILLERY (FA) MISSIONS AND THEIR SEVEN INHERENT RESPONSIBILITIES	X	X		X	2	2ndLt	3-IF-48	
3)	0802.04.03	PREPARE A TARGET LIST WORKSHEET AND SCHEDULING WORKSHEETS	X	X		X	2	2ndLt	3-IF-48	
4)	0802.04.04	RECOMMEND EMPLOYMENT OF FIELD ARTILLERY (FA) SPECIAL MUNITIONS (SMOKE, ILLUMINATION, FASCAM, ICM, COPPERHEAD)	X	X		X	2	2ndLt	3-IF-48	
10)	0802.04.10	PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST				X	2	1stLt	3-IF-53	
13)	0802.04.13	COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION				X	2	1stLt	3-IF-55	
DUTY AREA 05 - UNIT OPERATIONS										
3)	0802.05.03	CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION	X	X	X	X	2	2ndLt	3-IF-59	
6)	0802.05.06	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	X	X	X	X	2	2ndLt	3-IF-61	
8)	0802.05.08	SUPERVISE THE OPERATIONS OF A SURVEY SECTION			X	X	2	Capt	3-IF-62	
DUTY AREA 12 - NBC DEFENSE OPERATIONS										
1)	0802.12.01	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA			X	X	6	2ndLt	3-IF-91	
2)	0802.12.02	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	2ndLt	3-IF-92	
3)	0802.12.03	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	2ndLt	3-IF-93	

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 14 - PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)										
1)	0802.14.01	SUPERVISE THE PERFORMANCE OF THE SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)	X	X		X	2	2ndLt	3-IF-95	
2)	0802.14.02	SUPERVISE THE CHANGE OF THE MEMORY BATTERY	X	X		X	2	2ndLt	3-IF-96	
3)	0802.14.03	SUPERVISE THE PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE	X	X		X	2	2ndLt	3-IF-96	
4)	0802.14.04	VERIFY ERRORS CAUSING PLGR WARNING DISPLAYS	X	X		X	2	2ndLt	3-IF-97	
5)	0802.14.05	SUPERVISE THE PERFORMANCE OF NAVIGATION PROCEDURES WITH THE AN-PSN-11 (PLGR)	X	X		X	2	2ndLt	3-IF-98	
6)	0802.14.06	VERIFY THE DETERMINATION OF A POSITION IN THE AVERAGING MODE	X	X		X	2	2ndLt	3-IF-98	
7)	0802.14.07	SUPERVISE THE ENTRY OF A USER DEFINED DATUM	X	X		X	2	2ndLt	3-IF-99	
8)	0802.14.08	SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS	X	X		X	2	2ndLt	3-IF-99	
9)	0802.14.09	SUPERVISE THE PERFORMANCE OF PLGR TO PLGR OPERATIONS	X	X		X	2	2ndLt	3-IF-100	
10)	0802.14.10	VERIFY THE LOADING OF CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT	X	X		X	2	2ndLt	3-IF-100	

MOS 0803, SURVEY, METEOROLOGICAL, AND RADAR OFFICER

DUTY AREA 01 - SURVEY OPERATIONS										
4)	0803.01.04	SUPERVISE SURVEY OPERATIONS	X	X	X	X	3	WO1	3-IIF-2	
6)	0803.01.07	SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION	X	X	X	X	6	WO1	3-IIF-4	

MOS 0811, FIELD ARTILLERY CANNONEER

DUTY AREA 01 - CANNONEER										
2)	0811.01.02	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED			X	X	2	Pvt	3-IIIF-1	

DUTY AREA 02 - GUNNER/ASSISTANT GUNNER										
5)	0811.02.05	LAY A HOWITZER BY RECIPROCAL LAY, USING M100-SERIES SIGHT			X	X	2	Sgt	3-IIIF-17	
14)	0811.02.16	LAY A HOWITZER FOR DEFLECTION, USING M100-SERIES SIGHT			X	X	2	Sgt	3-IIIF-23	
15)	0811.02.17	REFER THE PIECE			X	X	2	Sgt	3-IIIF-24	
16)	0811.02.18	REPORT THE CORRECT DEFLECTION			X	X	2	Sgt	3-IIIF-25	
17)	0811.02.19	LAY THE M198 HOWITZER FOR INITIAL DIRECTION OF FIRE			X	X	2	Sgt	3-IIIF-25	
27)	0811.02.29	LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP)			X	X	2	Cpl	3-IIIF-31	

DUTY AREA 04 - PLATOON SERGEANT/LOCAL SECURITY CHIEF										
3)	0811.04.03	LAY THE FIRING BATTERY				X	2	SSgt	3-IIIF-46	
4)	0811.04.04	MEASURE THE ORIENTING ANGLE (OA)				X	2	SSgt	3-IIIF-46	
5)	0811.04.05	MEASURE THE AZIMUTH OF THE LINE OF FIRE				X	2	SSgt	3-IIIF-47	
12)	0811.04.12	CONDUCT THE BATTERY RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION			X	X	2	SSgt	3-IIIF-51	

DUTY AREA 05 - BATTERY GUNNERY SERGEANT										
1)	0811.05.01	EMPLOY THE HASTY SURVEY TECHNIQUES FOR DIRECTIONAL AND POSITIONAL CONTROL			X	X	2	GySgt	3-IIIF-57	
4)	0811.05.04	LAY THE BATTERY FOR AN EMERGENCY FIRE MISSION (HIP SHOOT) WHILE IN A CONVOY				X	2	GySgt	3-IIIF-59	
8)	0811.05.08	SUPERVISE A TACTICAL ROAD MARCH			X	X	2	GySgt	3-IIIF-62	

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
13)	0811.05.13	DIRECT AN ARTILLERY UNIT CROSSING OF A RADIOLOGICALLY CONTAMINATED AREA			X	X	6	GySgt		3-IIIF-65
14)	0811.05.14	SUPERVISE HASTY DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	GySgt		3-IIIF-66
15)	0811.05.15	SUPERVISE DELIBERATE DECONTAMINATION OF AN ARTILLERY UNIT			X	X	6	GySgt		3-IIIF-67
16)	0811.05.16	SUPERVISE PREPARATION OF AN ARTILLERY UNIT FOR A NUCLEAR ATTACK			X	X	6	GySgt		3-IIIF-68
19)	0811.05.19	DIRECT SUSTAINMENT AND/OR SKILL PROGRESSION TRAINING FOR THE BATTERY			X	X	1	GySgt		3-IIIF-70

DUTY AREA 06 - M101A1 HOWITZER

21)	0811.06.21	LAY FOR INITIAL DIRECTION OF FIRE, USING A DISTANT AIMING POINT (DAP) (AIMING POINT-DEFLECTION METHOD)				X	2	LCpl		3-IIIF-82
22)	0811.06.22	LAY A HOWITZER FOR INITIAL DIRECTION OF FIRE, USING M12-SERIES SIGHT				X	2	Pvt		3-IIIF-83
23)	0811.06.23	LAY A HOWITZER BY RECIPROCAL LAY, USING M12-SERIES SIGHT				X	2	Cpl		3-IIIF-84

MOS 0840, NAVAL SURFACE FIRE SUPPORT PLANNER

There are no Performance Support Tools assigned to any duty areas within this MOS.

MOS 0842, FIELD ARTILLERY RADAR OPERATOR

There are no Performance Support Tools assigned to any duty areas within this MOS.

MOS 0844, FIELD ARTILLERY FIRE CONTROL MAN

DUTY AREA 12 - SURVEY

23)	0844.12.23	UPDATE THE POSITION AND AZIMUTH DETERMINING SYSTEM (PADS) WITH PLUMB BOB OVER A STATION LOCATED BY GLOBAL POSITIONING SYSTEM (GPS)	X	X	X		2	Pvt		3-VIF-29
31)	0844.12.31	DECLINATE AN M2A2 AIMING CIRCLE	X	X	X		2	Pvt		3-VIF-33
32)	0844.12.32	DETERMINE A GRID AZIMUTH WITH A DECLINATED M2A2 AIMING CIRCLE	X	X	X		2	Pvt		3-VIF-34
36)	0844.12.36	CONDUCT AN ADJUST FIRE MISSION	X	X	X		6	LCpl		3-VIF-36
37)	0844.12.37	CONDUCT AN IMMEDIATE SUPPRESSION MISSION	X	X	X		6	LCpl		3-VIF-37
47)	0844.12.47	CONDUCT RECONNAISSANCE FOR ARTILLERY UNITS	X	X	X		2	Sgt		3-VIF-42

DUTY AREA 28 - AN/PSN-11 PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)

1)	0844.28.01	PERFORM SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)	X			X	2	Pvt		3-VIF-67
2)	0844.28.02	CHANGE THE MEMORY BATTERY IN THE AN/PSN-11 (PLGR)	X			X	2	Pvt		3-VIF-68
3)	0844.28.03	APPLY PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE FOR THE AN/PSN-11 (PLGR)	X			X	2	Pvt		3-VIF-68
4)	0844.28.04	IDENTIFY ERRORS CAUSING AN/PSN-11 (PLGR) WARNING DISPLAYS	X			X	2	Pvt		3-VIF-69
5)	0844.28.05	PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)	X			X	2	Pvt		3-VIF-70
6)	0844.28.06	DETERMINE A POSITION WITH THE AN/PSN-11 (PLGR) IN THE AVERAGING MODE	X			X	2	Pvt		3-VIF-70
7)	0844.28.07	ENTER A USER DEFINED DATUM IN THE AN/PSN-11 (PLGR)	X			X	2	Pvt		3-VIF-71
8)	0844.28.08	PERFORM DATUM TRANSFORMATIONS WITH THE AN/PSN-11 (PLGR)	X			X	2	Pvt		3-VIF-71

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
9)	0844.28.09	PERFORM PLGR TO PLGR OPERATIONS		X		X	2	Pvt		3-VIF-71
10)	0844.28.10	LOAD CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT WITH THE AN/PSN-11 (PLGR)		X		X	2	Pvt		3-VIF-72

MOS 0845, NAVAL GUNFIRE SPOTTER

DUTY AREA 02 - NGF SPOTTING PROCEDURES

6)	0845.02.06	CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION		X	X		X	2	2ndLt	3-VIIF-5
7)	0845.02.07	CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)		X	X	X	X	2	2ndLt	3-VIIF-5
8)	0845.02.08	CONDUCT A DANGER CLOSE FIRE MISSION		X	X	X	X	2	2ndLt	3-VIIF-6
9)	0845.02.09	REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)		X	X	X	X	2	2ndLt	3-VIIF-7
10)	0845.02.10	CONDUCT AN ILLUMINATION MISSION		X	X	X	X	2	2ndLt	3-VIIF-7
11)	0845.02.11	CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)		X	X	X	X	2	2ndLt	3-VIIF-8
12)	0845.02.12	CONDUCT SIMULTANEOUS MISSIONS WITH NAVAL SURFACE FIRE SUPPORT (NSFS)		X	X	X	X	2	2ndLt	3-VIIF-9
13)	0845.02.13	CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)		X	X	X	X	2	2ndLt	3-VIIF-9
30)	0845.02.30	CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION		X	X	X	X	2	2ndLt	3-VIIF-19

DUTY AREA 04 - MAP READING AND LAND NAVIGATION

13)	0845.04.13	DETERMINE A POSITION WITH THE AN/PSN-11 (PLGR) IN THE AVERAGING MODE		X	X	X	X	2	2ndLt	3-VIIF-28
14)	0845.04.14	PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)		X	X	X	X	2	2ndLt	3-VIIF-29

MOS 0847, ARTILLERY METEOROLOGICAL MAN

There are no Performance Support Tools assigned to any duty areas within this MOS.

MOS 0848, FIELD ARTILLERY OPERATIONS MAN

DUTY AREA 13 - SURVEY

36)	0848.13.36	SUPERVISE THE CONDUCT OF AN AREA FIRE MISSION		X	X	X	X	2	SSgt	3-IXF-60
37)	0848.13.37	SUPERVISE THE CONDUCT OF AN IMMEDIATE SUPPRESSION MISSION		X	X	X	X	2	SSgt	3-IXF-61
47)	0848.13.47	SUPERVISE RECONNAISSANCE FOR ARTILLERY UNITS		X	X	X	X	2	SSgt	3-IXF-65

DUTY AREA 24 - PRECISION LIGHTWEIGHT GPS RECEIVER (PLGR)

1)	0848.24.01	SUPERVISE THE PERFORMANCE OF THE SETUP PROCEDURES ON THE AN/PSN-11 (PLGR)		X	X		X	2	SSgt	3-IXF-82
2)	0848.24.02	SUPERVISE CHANGING THE MEMORY BATTERY FOR THE AN/PSN-11 (PLGR)		X	X		X	2	SSgt	3-IXF-82
3)	0848.24.03	SUPERVISE THE PROCEDURES FOR PERFORMING EMERGENCY ZEROIZE FOR THE AN/PSN-11 (PLGR)		X	X		X	2	SSgt	3-IXF-83
4)	0848.24.04	SUPERVISE VERIFICATION OF ERRORS CAUSING AN/PSN-11 (PLGR) WARNING DISPLAYS		X	X		X	2	SSgt	3-IXF-83
5)	0848.24.05	SUPERVISE THE PERFORMANCE OF NAVIGATION PROCEDURES WITH THE AN/PSN-11 (PLGR)		X	X		X	2	SSgt	3-IXF-84
6)	0848.24.06	VERIFY THE DETERMINATION OF A POSITION IN THE AVERAGING MODE WITH THE AN/PSN-11 (PLGR)		X	X		X	2	SSgt	3-IXF-85
7)	0848.24.07	SUPERVISE THE ENTRY OF A USER DEFINED DATUM IN THE AN/PSN-11 (PLGR)		X	X		X	2	SSgt	3-IXF-85

SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
8)	0848.24.08	SUPERVISE THE PERFORMANCE OF DATUM TRANSFORMATIONS WITH THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-86
9)	0848.24.09	SUPERVISE THE PERFORMANCE OF PLGR TO PLGR OPERATIONS	X	X		X	2	SSgt		3-IXF-86
10)	0848.24.10	VERIFY THE LOADING OF CRYPTO/TIME VARIABLES TO REQUIRED SURVEY/COMMUNICATIONS EQUIPMENT WITH THE AN/PSN-11 (PLGR)	X	X		X	2	SSgt		3-IXF-87
DUTY AREA 37 - 81 MM MORTAR PLATOON OPERATIONS										
8)	0848.37.08	LAY MORTAR SECTION/PLATOON PARALLEL				X	2	SSgt		3-IXF-120
MOS 0861, FIRE SUPPORT MAN										
DUTY AREA 01 - MAP READING AND M2 COMPASS										
13)	0861.01.13	DETERMINE A POSITION WITH THE AN/PSN-11 PLGR IN THE AVERAGING MODE	X	X		X	2	Pvt		3-XF-7
14)	0861.01.14	PERFORM NAVIGATION PROCEDURES WITH THE AN/PSN-11 PLGR	X	X		X	2	Pvt		3-XF-8
15)	0861.01.15	CONDUCT BATTLEFIELD REPORTING			X	X	2	Pvt		3-XF-8
DUTY AREA 03 - OBSERVED FIRE PROCEDURES										
11)	0861.03.11	CONDUCT AN ADJUST FIRE MISSION	X	X	X	X	2	Pvt		3-XF-28
17)	0861.03.17	CONDUCT A SUPPRESSION MISSION ON A PLANNED TARGET		X	X	X	2	Pvt		3-XF-32
40)	0861.03.42	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE			X	X	2	Pvt		3-XF-49
41)	0861.03.43	CONDUCT AN ARTILLERY SUPPRESSION OF ENEMY AIR DEFENSE (SEAD)	X	X		X	2	Pvt		3-XF-50
42)	0861.03.44	CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION	X	X	X	X	2	Pvt		3-XF-51
43)	0861.03.45	CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) MISSION	X	X		X	2	Pvt		3-XF-51
44)	0861.03.46	CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-52
45)	0861.03.47	CONDUCT A DANGER CLOSE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-53
46)	0861.03.48	REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-53
47)	0861.03.49	CONDUCT AN ILLUMINATION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-54
48)	0861.03.50	CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-55
49)	0861.03.51	CONDUCT SIMULTANEOUS MISSIONS WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-55
50)	0861.03.52	CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	X	X		X	2	Pvt		3-XF-56
51)	0861.03.53	CONDUCT A NAVAL GUNFIRE (NGF) COORDINATED ILLUMINATION MISSION	X	X	X	X	2	Pvt		3-XF-56
DUTY AREA 04 - FIRE SUPPORT PLANNING AND COORDINATION										
8)	0861.04.08	PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST		X		X	2	Sgt		3-XF-61
18)	0861.04.19	COORDINATE A REQUEST FOR A PREPLANNED CLOSE AIR SUPPORT (CAS) MISSION		X		X	2	Sgt		3-XF-66
19)	0861.04.20	COORDINATE A REQUEST FOR IMMEDIATE CLOSE AIR SUPPORT (CAS)		X		X	2	Sgt		3-XF-67
21)	0861.04.22	PLAN/COORDINATE FIRE SUPPORT TO SUPPRESS ENEMY AIR DEFENSE		X		X	2	Sgt		3-XF-68

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SEQ	TASK	TITLE	CORE	FLC	DL	PST	SUS	REQ	BY	PAGE
DUTY AREA 05 - COUNTERFIRE										
5)	0861.05.05	PREPARE/SUBMIT STANDARD SHELLING, MORTARING, AND BOMBING REPORT				X	X	6	Pvt	3-XF-77

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